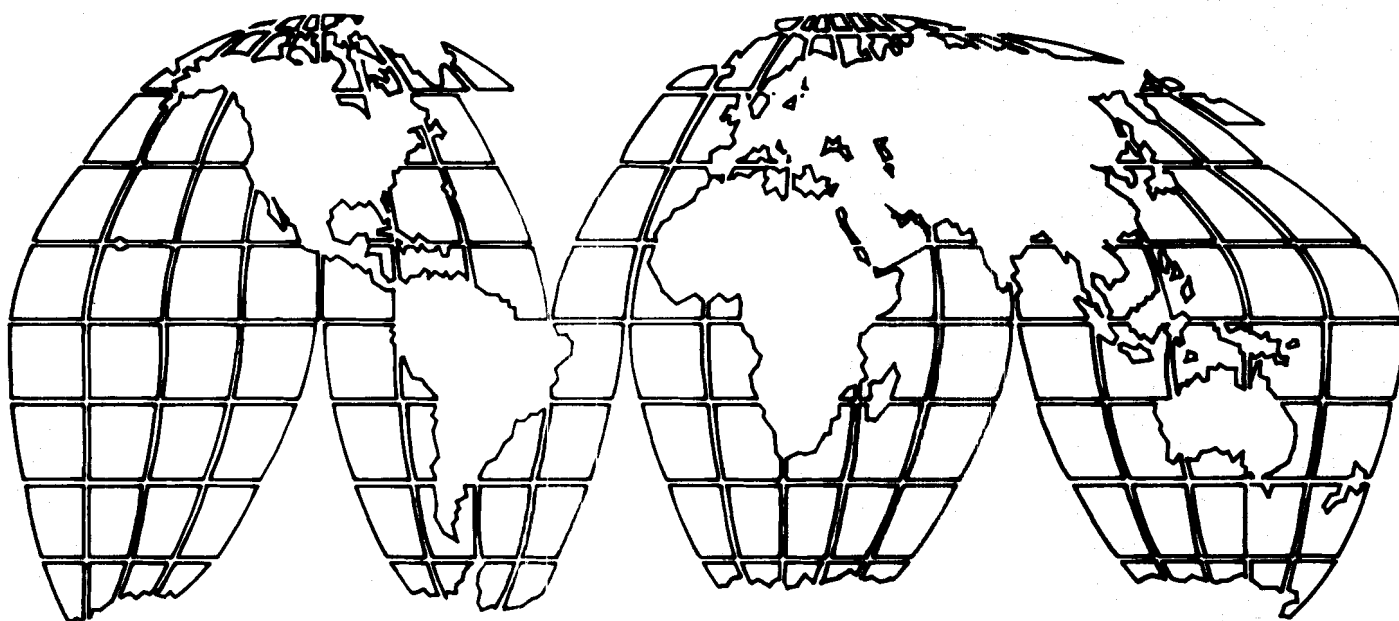


A.I.D. Evaluation Special Study No. 4

# **The Social Impact of Agribusiness: A Case Study of ALCOSA in Guatemala**

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July 1981

U.S. Agency for International Development (AID)

PN-AAJ-172

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(continued inside back cover)

THE SOCIAL IMPACT OF AGRIBUSINESS:  
A Case Study of ALCOSA in Guatemala

by

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## PREFACE

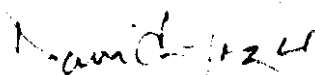
During the past year, the Development Programs Office of the Bureau for Latin America and the Caribbean initiated efforts to incorporate more social analysis into the programming and policy planning activities of the Bureau. A significant part of this effort has focused on an examination of the social consequences -- direct/indirect and intended/unintended -- of specific development projects. The primary aim of this examination has been to identify key issues relevant to improving our understanding of the social consequences of the development process.

The social impact study of the AID-supported Latin American Agribusiness Development Corporation (LAAD) nontraditional agribusiness project is an especially interesting outcome of our examination of the above topic. The 1980 study of the social impact of this activity was an outgrowth of a 1977 project evaluation which included case studies of the impact of the project on two highland communities in Guatemala. The 1977 evaluation concluded that the project had an immediate and substantial impact on small farm production in these two communities and resulted in higher incomes for the participants. The report also concluded that the social impact of the project was in evidence in many important aspects of village life, e.g., land tenure arrangements, inter-ethnic relationships, farm management, and economic polarization. However, the report went on to point out that the long term implications of these changes remained uncertain.

In 1980 the same sociologist who had participated in the 1977 evaluation returned to Guatemala to examine in greater depth the social impact of the project. The research included the two communities previously studied as well as two new sites. The follow-up study divides the analysis of social impact issues into three categories: community-level impacts; changes in family patterns; and personal consequences. This division is useful and attempts to establish a relationship between the general impacts of the program, most readily identifiable at the community level, and the implication of these changes for the family and the individual. In addition, the division emphasizes the family and the individual as important units of analysis, drawing attention to issues often ignored in social impact studies.

The conclusions of the study highlight the changeable nature of the economic impact of development projects but indicate the widespread social impacts of potentially much longer term consequences associated

with specific development activities. In addition, the study provides a richly detailed picture of the problems and successes encountered by an agribusiness firm in its operations with small farmers. However, the study does not purport to be an evaluation of this agribusiness project; rather, it is a very interesting in-depth examination of the social consequences of the development process.



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## Chapter 1

### INTRODUCTION

The growth of large agribusiness enterprises: does it help or hinder the development of the rural poor, those most in need of the benefits of socioeconomic development? After ten years at the center of development controversy this question remains today as important as ever, and almost as unresolved. This case study of the social impact of one agribusiness corporation in Guatemala addresses this very large question, and we believe, contributes something towards its answer. Specifically, we were asked to discover and describe the social impacts--intended and unintended--of this agribusiness firm on the farmers and workers who have been affected by its growth. The focus of this study is therefore the positive and negative impacts of one firm's growth. By comparing the impact on different groups of farmers and workers, and on different towns in the area, it is possible to describe not only the positive and negative impacts, but the social and organizational circumstances which tend to maximize or minimize the positive benefits.

We report here the results of an in-depth case study of a single case of agribusiness growth, the operations of ALCOSA (Alimentos Congelados Monte Bello, S.A.) in Guatemala, Central America. ALCOSA is a wholly-owned subsidiary of the North American firm, Hanover Brands Incorporated, which began its Guatemalan operations in the year 1975. Since its beginnings in Guatemala, ALCOSA has received a part of its total financing through loans made by LAAD de Centroamerica, a subsidiary of the Latin American Agribusiness Development Corporation. In its turn, LAAD de Centroamerica has been developed largely on the basis of two loans, reaching a total of \$11 million, made at concessional interest rates by the United States Agency for International Development through its Regional Office for Central American Programs (ROCAP).

The purpose of LAAD is the development of nontraditional agribusiness, that is, agribusinesses that serve to diversify the agro-industrial system and commercial agriculture in the region where LAAD operates. Besides this central focus, AID has insisted as a condition of its second loan that LAAD-financed projects directly benefit small farmers and rural farmworkers that form the poorest strata of underdeveloped countries.

In an evaluation of this second loan, carried out in 1977 by a team from the consulting firm of Checchi and Company, the LAAD loan to ALCOSA and the operations of ALCOSA in Guatemala were cited as one of the LAAD projects that best fulfilled the purposes of AID in terms of benefits to the rural poor.

As a result of that 1977 evaluation the operations of LAAD and ALCOSA were cited by AID in congressional testimony as success stories with maximum positive socioeconomic impact. But the same report has also been cited by North American critics of AID, such as Frances Moore Lappe and Joseph Collins

in their well-known book Food First, as an example of unexpected negative impacts. In an attempt to resolve such ambiguities, and also in an attempt to improve the methodology for the scientific analysis of social impacts and such projects, the Development Programs office of the Latin American and Caribbean Bureau of AID (LAC/DP) called on the sociologist who was author of the social sections of the Checchi report to return to Guatemala and carry out a deeper follow-up investigation of ALCOSA's social impact. Dr. Kusterer accepted this responsibility and returned to Guatemala in July 1980 to spend four months there carrying out this research. In his work he was greatly aided by several circumstances that permitted him to improve on his previous efforts: the greater time and greater resources available for the present research; the much more concentrated and limited focus of the present research project; the three additional years of ALCOSA's operations in Guatemala which have clarified many of its social impacts; the availability of information from the 1977 study that can serve as baseline data; and especially, the help in all aspects of the research of his two co-researchers and co-authors of this report, María Regina Estrada de Batres and Josefina Xuya Cuxil.

### Methods of the Research

Within this single case study of ALCOSA, four separate research efforts were carried out in four sites in Guatemala: San José Pinula, Department of Guatemala, the site of ALCOSA's processing plants; Chimachoy, village of the Municipality of San Andrés Itzapa, and Patzicía, itself a Municipality, both of the Department of Chimaltenango, the two original sites where ALCOSA began to buy raw material from small farmers and the two sites studied in 1977; and Santiago Sacatepequez, Department of Sacatepequez, another of the areas where ALCOSA first began to buy, and a site where the social impact has been quite distinct from the other two agricultural zones.

The conclusions of this report have as their base a variety of research activities that permitted us to accumulate data of various types from various sources. This diversity of data types and sources, technically called "methodological triangulation", should theoretically increase the validity of the findings through the cross-verification that it makes possible. In each site, the research began with several days of observation of the activities of ALCOSA there and of the relationships between ALCOSA employees who are its field representatives and the participating farmers in such activities. During those days of observation, informal conversations and interviews were carried out with as many people as possible in the zone. The purpose of this preliminary phase of the research was the orientation of the researchers, the search for reliable informants, and the delimitations of important matters that deserved further investigation. Then the research entered into a phase of interviews and observations in this site. At the same time, secondary quantitative data was collected from various Guatemalan sources and from the documents of ALCOSA itself, and persons with specialized

knowledge from various points of view were sought out and interviewed. Such persons included agronomists, processing plant technical experts, businessmen, government officials, rural development people working in the area, and larger farmers with ALCOSA experience. Only after all this varied data had been collected and the important issues well defined, three relatively simple questionnaires were developed and pretested to carry out small surveys among three distinct groups of people affected by ALCOSA: farmers directly contracted by ALCOSA; the wives, mothers and other female family members of such contractees; and the female employees of the processing plant itself. While this data collection continued, the analysis of the data was already begun and certain tentative conclusions reached. Such simultaneous collection and analysis of data permits that further data may be collected as the analysis demands and that the tentative conclusions can be verified if necessary with new data sources. As a final stage of the project the tentative conclusions were presented in meetings with various groups affected by our research, including individuals and groups of farmers and employees as well as more official representatives of ALCOSA, LAAD, and ROCAP.

After ten weeks of the research, it was quite clear that the social impact of ALCOSA in the two agriculture zones that we were investigating, Chimachoy and Patzicía, were somewhat different from the social impacts in other zones. We for this reason sought permission to change the plan of study, to include another agricultural zone, Santiago Sacatapéquez. The reasons for this decision, and the differences between Santiago Sacatapéquez and the other two research sites, are described more fully in the case study chapters that follow.

As we carried out this research, certain circumstances arose that sometimes helped and sometimes hindered the research, circumstances which must be mentioned here. On the positive side, throughout the research we were given complete cooperation by the managements of both LAAD and ALCOSA. We believe that without this cooperation the research would have been impossible. We would like to emphasize this cooperation, because it is very rare that a research project as much in-depth as this one is carried out inside the walls of a private enterprise, especially an enterprise like ALCOSA which is not a public corporation and might be expected therefore to prefer to guard its own secrets to protect its competitive position. The chief executive officer of ALCOSA, Mr. Victor Schultz, spent considerable time in interviews with us and graciously granted us access to observe all aspects of the company's operations. Occasional minor problems of lack of cooperation with field employees, understandably made nervous by such continuous careful observation, were quickly resolved with the intervention of higher level ALCOSA management.

On the other hand, the research was much hindered by the operational crisis which ALCOSA went through shortly after our arrival, and the disputes and controversies which swirled through the farming villages as a result of the measures taken by ALCOSA in its attempts to resolve this crisis.

These circumstances are described in detail later in the report; it is only necessary to note here that controversy, hostility, and tension made the research effort more difficult than it might have been otherwise. Similarly, the escalating wave of political unrest and rural violence in Guatemala had, by the end of the research period, begun to affect the attitudes of our informants and respondents in three of the four sites. The resulting fear and distrust undoubtedly led some villagers to speak less frankly to us and other villagers to avoid contact with us altogether. In general, however, we were treated with warmth, affection, and friendship by our respondents. We are confident that sufficient rapport was established with a sufficiently large cross-section of the population to reasonably assure the validity of their responses.

### The Researchers

The contractor and head of the research project is Dr. Ken Kusterer, sociologist and co-author of the previous evaluation of LAAD. He has a broad experience in the investigation of social aspects of the efforts of institutions and enterprises involved in economic development. His previous work includes research in the social aspects of more than one hundred institutions, organizations, or firms involved in more than thirty branches of industry and agriculture in seven countries. The results of this research have been published in the book, Know-How on the Job: The Important Working Knowledge of "Unskilled" Workers, and other articles and scientific reports. His educational background includes a certificate of agriculture, bachelor's and master's degrees in sociology and Latin American studies, and a Ph.D in Sociology. He is currently a tenured member of the Sociology Department of the American University in Washington, D.C.

In addition to his responsibility as head of the research, Dr. Kusterer also carried out the interviews with the administrators of LAAD and ALCOSA and other specialists and technicians, informal interviews with farmers in the three agricultural sites, and observations in all sites. Finally he carried out the survey of farmers, designing and testing the questionnaire, and carrying out a majority of the interviews with 117 respondents. In this last effort he was greatly aided by Jorge Xuyá Cuxil, who also carried out a large number of the survey interviews in Cakchiquel.

María Regina Estrada de Batres, since finishing her master's studies in Guatemalan anthropology at the University of Del Valle, has taught courses in sociology and cultural anthropology in that university and also in Rafael Landívar University and other Guatemalan colleges. She is the author of various articles, papers and scientific reports, including a study of the socioeconomic aspects of a development project of the government's economic development agency, various papers and articles on the Guatemalan family in urban as well as rural zones, and also a study of the world view of the Cakchiquel peoples of San Andres Itzapa and Santiago Sacatepequez, two of the four sites of this research. In addition, she has for the last

four years been a resident in the San José Pinula area, the site of ALCOSA's processing plant. Ms. Estrada de Batres was in charge of the investigation of the social impact of ALCOSA on the lives of the employees and their families in the San José Pinula vicinity. She carried out informal interviews with management and supervisors of ALCOSA, with groups of employees and other local persons with specialized knowledge of some aspects of ALCOSA's operations and its social effects. Besides these informal interviews and her observations in the plant, she designed the survey instrument and carried out forty survey interviews with ALCOSA employees in their homes. Beyond her work in San José Pinula, she reviewed the field notes from the other three sites and fully participated in the formation of the general conclusions of this report.

Since completing her studies as an extramural teacher of family education, Josefina Xuyá Cuxil has worked as a rural extension agent among women for various rural development programs in the Department of Chimaltenango. She has a broad experience in the teaching and organization of rural women for family and community improvement, and has participated in various international development projects. She had worked previously in the village of Chimachoy, one of the sites of this research, and has also lived her life as a resident of Tecpan, the town next to Patzicía, another of the sites. Her native language is Cakchiquel, the language of 95% of the respondents who live in the three agricultural sites included in this investigation.

Ms. Xuyá Cuxil was in charge of the research within the female population of the agricultural sites. She carried out in each site field observations and informal interviews with groups and individual informants, she collaborated in the design of the questionnaires for the formal interviews with farmers and with farmers' wives and she was in charge of all Spanish-Cakchiquel translations in the research. She made one hundred and fifteen formal survey interviews with female family members of farmers, and she took part in the collaborative process that formed the general conclusions that are presented here.

#### The Organization of This Report

This research report is organized in the following form: After this brief introduction, Chapter Two is an executive summary of the research and its findings. The report itself begins with Chapter Three, a description of the operation of ALCOSA and of its activities since the previous evaluation made in 1977. A description of the social effects of the company cannot make much sense to the reader if he or she does not know what exactly the company has done that has caused these effects. After this general description of ALCOSA, there follow four chapters describing each research site, what ALCOSA has done in each site, the expected and unexpected social effects that have resulted, and an analysis of the causes and probable consequences of the most important of these social effects. In the three agricultural cases, two levels of social impacts are treated, community impacts and individual impacts. In the case of San José Pinula, only household impacts are presented in accordance with the requirements of our scope of work. Finally, an appendix to this report reproduces the three questionnaires used in our surveys.

## Chapter 2

### EXECUTIVE SUMMARY

†  
Description of Research. AID asked us to carry out a case study of the "intended and unintended" social impacts of one American agribusiness firm in Guatemala, ALCOSA, a vegetable freezing sub-project of LAAD whose social impacts were positively evaluated in a 1977 evaluation. The research team included: Dr. Ken Kusterer, an American Sociologist and co-author of the 1977 evaluation; María Regina Estrada de Batres, a Guatemalan anthropologist; and Josefina Xuyá Cuxil, a field researcher and a native Cakchiquel speaker. We carried out 4 months of field research in four sites, the plant site at San José Pinula, and three cauliflower producing highland towns, Chimachoy, Patzicía, and Santiago Sacatapequez. Research in each site included observation, hundreds of group and in-depth interviews, and 284 survey interviews with farmers, plant workers, and their families.

Description of ALCOSA. A wholly-owned subsidiary of Hanover Brands whose start-up in Guatemala was partially financed by LAAD, ALCOSA purchases and freezes vegetables (cauliflower, broccoli, brussels sprouts, snow peas, and okra) for export to the United States. In 1979, it purchased 11 million pounds of these products from 2,000 farmers, 95 percent of them very small. The company operates buying stations to purchase cauliflower and broccoli in seventeen small highland villages, including the three research sites.

Operating Problems in 1980. The company's form of organization and the extent of its impact on the rural poor were very positively evaluated in the 1977 study. By 1980, however, organizational and technical problems had precipitated an operating crisis. The size of the highlands purchasing had outstripped capacity to control and administer it. Field employees had defrauded small farmers, sometimes for long periods, before being detected and dismissed by management. Contracts were signed for much more broccoli and cauliflower in 1980 than the plant had the capacity to process, leading to a breakdown of the field organization, temporary suspensions of purchases, and losses for 300 to 400 of the 2,000 small farmers, including a majority of those in Chimachoy and Patzicía.

### The Highland Villages

Agricultural Effects. Cultivation shifted from a pattern of diversified vegetable and corn production to a concentration upon cauliflower; displaced crops were primarily corn, beans, and cabbage. The use of agricultural production credit, previously nonexistent in these villages, is now the common practice of almost all growers, as a result of ALCOSA's credit sales of farm inputs. Average investment in small equipment (horses, sprayers, containers, etc.) has increased 200 to 400 percent (to \$100 or \$200, respectively).

Investment of both inputs and labor per acre of vegetable has also increased. All participating farmers have acquired a great deal of new kind of agricultural know-how: knowledge of expert processing requirements; greater sophistication regarding contractual, legal, and economic aspects of farmer-processor relations; familiarity with new crops and new varieties of previous crops; more sophisticated consumption of fertilizers, insecticides, and other chemical inputs. The scale of small family farm enterprises has increased, in terms of required labor, investments, quantity of production, and (in Chimachoy) acreage planted.

Agricultural Effects, Regional. Reject and overflow cauliflower from ALCOSA cauliflower farmers is probably sufficient of itself to more than fill the national market. Rainy season prices in 1980 were extremely low. On the other hand, the market price of cabbage has stabilized, at least partially because many cabbage growers have switched to cauliflower. Reject broccoli is appearing on the national market, where the product was previously unknown, and its low price has begun to attract some local consumers. Several agricultural research and extension programs operated by government and private agencies have begun to emphasize ALCOSA crops.

Economic Effects. Farm incomes in all sites increased substantially prior to 1980. Incomes this year remained steady in Santiago, declined in Patzicía, and there were net losses in Chimachoy. Income has not increased as rapidly as projected in 1977; ALCOSA has changed its buying procedures and raised its quality standards and therefore purchases a lower percentage of the total crops. As yields in Santiago demonstrate, there remains a potential for very large increases in income in Patzicía and Chimachoy if farmers switch to new varieties or otherwise increase their yields. Prior to the extraordinary losses this year, ALCOSA paid better than any other source available to small farmers, except for larger (but still small) farmers in Patzicía, who can find better markets for other vegetable products. Chimachoy, with its relatively limited access to other markets, experienced a rapid economic growth in 1977-79 as a result of increased earnings.

Effects on Social Stratification. As predicted in 1977, a division has emerged in Chimachoy between a less poor upper stratum of village farmers and the rest of the farmers in the village. In Patzicía and Santiago, however, ALCOSA has unexpectedly had the opposite effect. In both areas, only the poorest of local farmers participate in ALCOSA's program. This participation has enabled them to increase their incomes while remaining independent family farmers and minimized the necessity of seeking work as farm laborers for their less poor farm neighbors. ALCOSA has provided the smallest farmers an opportunity to participate in commercial agriculture almost as profitable as that which fuels the expansion of larger farmers nearby. In Patzicía, ALCOSA's close relationship with its Ladino subcontractor has exacerbated the strong Ladino-Cakchiquel tensions in the town. In all three sites, poorest families no longer depend on farm labor jobs for their income, the supply of farm laborers has decreased sharply, and daily wages have increased. ALCOSA's impact on these phenomena was demonstrated when ALCOSA stopped purchasing

cauliflower in 1980--large numbers of poor farmers sought paid employment, and wage rates fell sharply.

Effects on Community Organization. Swiss advisors in Santiago have helped small farmers use ALCOSA as an organizing resource to build a new cooperative. By restricting local ALCOSA purchases to cooperative members, the co-op has been able to recruit most of the poorest farmers in the municipality. Similar organizing efforts have been so far unsuccessful in Chimachoy, and in Patzicia no attempts have been made toward any kind of collective organization.

Household Effects, Standard of Living. Poorest families used increased income to meet basic needs (better food, clothing, housing improvements, etc.) and to permit children to attend school instead of seeking paid employment. The upper stratum of poor families in Patzicia and Chimachoy used increased incomes to undertake major improvements: starting stores, building "formal" houses, purchasing more land (Chimachoy), and pick-up trucks (Patzicia). Families at all economic levels substantially increased their indebtedness, through small consumer purchases with time-payments, through agricultural production borrowing, and through loans for major purchases (land, housing, motor vehicles). Families at all levels improved and varied diets, due to expanded food purchases and increased consumption of reject vegetables. (Producing vegetables for local markets, families never could afford to consume their own vegetables.)

Household Impacts, Social Roles. The women's role in the family has changed considerably in Chimachoy and Santiago, where they now spend many days in agricultural work and fewer days in market vending or household duties. No such change has occurred in Patzicia, where families use hired field workers rather than female family members. Children, no longer needed as a source of outside income, are encouraged to attend school. Likewise, men seek less employment outside the family farm. ALCOSA has therefore broken down the segregated work spheres of family members and reintegrated them into the work activities of the expanded family farm enterprise. The effect of ALCOSA is to support, at least on the surface, values of family "togetherness" (although this value is more expressed by urban families who do not experience it than by these rural families who do).

Personal Effects, Rising Aspirations. Through contact with ALCOSA, farmers and their families have come to hope and believe that expanded commercial production of vegetables is their key to economic advancement. Through this route, they hope to remain in their preferred occupation, independent farming, and to enjoy the economic gains that previously were possible only through migration. These small farmers want to remain independent farmers, but they no longer accept the cycle of subsistence poverty that has in the past trapped those in this occupation. Whether they are as satisfied with ALCOSA as the farmers of Santiago, or as unsatisfied as the others, all seek to continue marketing such large quantities to some commercial purchaser. If they can help it, they have no intention of returning to the production of small quantities for time-consuming sales to local markets.



### The ALCOSA Plant Site.

Economic Effects. Take-home pay of ALCOSA employees ranges between 150 percent and 300 percent of the rate of pay available in the two principal alternative occupations, domestic service and market sales, with the lower figure in those periods when a full day of work is not available and the higher figure during peak seasons of heavy overtime. These pay rates are about the same as men can earn in the most common blue-collar occupations such as construction labor, and much more than men can earn in the typical occupation of the outlying villages, farming. This ALCOSA wage is at least the equal of the normal family income of small-town blue-collar workers or village farmers. In most cases, it is a second or third income and serves as a considerable increase in the family standard of living. In more than a quarter of the cases it permits the ALCOSA employee to start a separate household of her own. All of these women either pay women in other households for essential child care and food preparation services or make contributions to support their parents' or children's households elsewhere.

Household Effects. Freed of economic dependency on fathers or spouses, many ALCOSA employees are able to reorganize family structures in preferred patterns, either starting single-parent households of their own, returning to their own parents' households or merging with the households of other relatives. Some married women have been able to detach their immediate family from larger extended family households and begin nuclear households of their own.

ALCOSA employees remain dependent on other women for tortilla preparation and child care services. Where the new household does not include non-working women capable of carrying out these tasks, the normal arrangement is for related women in other households to carry on these functions in exchange for a cash payment.

Effects on Dependent Children. The effect of a mother's employment at ALCOSA on her children depends primarily on the mother's ability to arrange for suitable food preparation and child care substitutes. For women who live with or near female relatives, care and feeding may actually be improved due to higher income, and children are more likely to attend school longer since the family no longer needs income from children's outside employment. A few mothers, on the other hand, who have migrated long distances to seek this employment and who are therefore isolated from other family members have been unable to find suitable child care. In these cases, very young children are left to feed and care for their even younger siblings. Under this unsatisfactory arrangement, none of the children are likely to attend school.

Work Satisfaction. Ninety-five percent of interviewed employees report high satisfaction with their pay, their jobs, and their lives as working women. Aside from the pay, the best aspects of their jobs include

the companionship of fellow employees and the fairness and respect of supervisors. Worst aspects include the seasonality of the work and the resulting unpredictability of earnings and work availability, night work, and excessive overtime, especially Sunday work.

Personal Effects: Family Status. Because they are important supporters of their households, ALCOSA employees enhance their positions within their families, being accorded more importance and treated with more respect by other family members. Since they retain ultimate control over their income, they assume a central role in family decisions.

Personal Effects: Attitudes Towards Working. ALCOSA employees prefer their paid jobs to working at home. Almost all of them plan, if possible, to continue working indefinitely, and to make whatever adjustments are necessary in future family life to permit continued employment.

Personal Effects: Consumerism. Norms within the work community at the ALCOSA plant require a more costly, more urbanized standard of personal appearance, including more fashionable footwear and clothing and an increased use of cosmetics. Employees with additional disposable income make similar improvements in the clothing standards of their children and possibly other women in their families. Time payments for major purchases of tableware, home furnishings, and home entertainment equipment are also common. Young women also spend more for personal entertainment in the capital, primarily the cinema. These expenditures are a source of major satisfaction for the women, visible evidence of their progress out of poverty and a life of bare subsistence. With these expenditures they nurture in themselves a higher sense of their own worth and their sense that their lifestyle is better than that of more traditional women who stay at home.

Personal Effects: Family Size. Women who begin work for ALCOSA before marriage or childbirth are likely to marry later than other women in rural Guatemala. They are apparently more likely to have children unsanctioned by residential union with the father. Most of the respondents in their mid-20s had two children or less and many had none, far fewer than would be the case if they had married as teenagers and remained at home.

Personal Effects: Freedom and Independence. Less subordinated in their families because of their control over earnings that are at least an important part of family income, and subject at work to a less total domination than domestic or small business employees, ALCOSA employees develop attitudes of greater independence and self-reliance. After a remarkably short time of ALCOSA employment, these attitudinal changes are reflected even in the women's physical demeanor and manner of speaking. Their independent bearing, along with their more fashionable clothing, fuels the local stereotype characterizing factory working women as sexually immoral. Since traditional notions of morality in the area are so entwined

in the double standard and other customs of female submissiveness, this stereotype is an ideologically distorted reflection of real changes in the employees' attitudes and behavior.

Personal Effects: Self-Esteem. The increased respect accorded ALCOSA employees both in their homes and in their workplace leads to increased self-respect and self-esteem in the women themselves. This is the core attitude in the general "rising expectations" syndrome. It should lead to reduced passivity and increased sense of self-efficacy. The numbers of employee respondents who have made major changes in their family structures and household arrangements to make for themselves a more satisfactory home life would suggest that these changes in fundamental attitudes have already (at least for some women) begun to have important behavioral effects.

### Chapter 3

#### BACKGROUND DESCRIPTION: LAAD AND ALCOSA

The Latin American Agribusiness Development Corporation S.A. (LAAD) is a private financial institution specializing in the financial development of nontraditional agribusiness enterprises in Latin America. Since its incorporation in 1970, LAAD has shown a continuous growth. This growth reflects increased investments by the major international banking and agribusiness enterprises that form its shareholders, but by far its largest source of new capital has been a series of loans made at concessional rates of interest by the Agency for International Development. LAAD's Central American subsidiary, in particular, has been the beneficiary of two loans totaling \$11 million made by AID's Regional Office for Central American Programs (ROCAP).

In 1977, ROCAP commissioned the consulting firm of Checchi and Company to evaluate such things as the financial viability of LAAD and its loan recipients, and the economic and social impact of LAAD's uses of the AID loan. In that evaluation, LAAD's loan to ALCOSA was singled out as resulting in unusually high economic and social benefits to small farmers in Guatemala. ALCOSA thus became one of AID and LAAD's major "success stories," at least in terms of small farmer benefits.

Alimentos Congelados S.A. (ALCOSA) began operations in Guatemala in 1971 with a small initial LAAD loan. Hardly more than a household business at that time, ALCOSA specialized in freezing fruits and vegetables for the small local market and small quantities of specialized products, such as guacamole dip, for export.

In 1975, the company was purchased by Hanover Brands, Inc., an American processor and distributor of frozen and canned fruits and vegetables. With investments from Hanover and with increased financial support from LAAD, ALCOSA's plant was substantially expanded and rebuilt and its business reorganized and reoriented toward the processing of large quantities of a few specific labor intensive vegetables for the North American market.

Although it has frozen other products, primarily fruits, in small batches, the great bulk of ALCOSA's production consists of okra, broccoli, cauliflower and brussels sprouts. Okra is a warm weather crop grown for ALCOSA by a relatively small number of medium sized growers in the Department of Zacapa. Investigation of the company's operations in this crop were not carried out in the 1977 evaluation, nor are they a part of this report. The other three products, however, are cold weather crops best grown in the central highland regions where most of Guatemala's small and indigenous farmers are concentrated. ALCOSA's processing of these latter products has expanded continuously since that company first began production operations in 1976. For example, raw material purchases of cauliflower,

broccoli and brussels sprouts totaled 5,195,355 pounds in 1978, 11,357,946 pounds in 1979, and 7,562,725 pounds in the first six months of the 1980 fiscal year.

ALCOSA freezes all of these products in its plant at San José Pinula, located in the Department of Guatemala some 20 km to the southwest of the capital, just off the Pan American Highway to El Salvador.

The plant is organized in a classic food processing assembly line format. In one large room women cut and trim the raw materials as pieces of broccoli or cauliflower pass before them on an assembly line, sort it according to quality, and return it to smaller more specialized assembly lines. At the end of the line the product is sorted, inspected once more for quality. In the freezing room, another assembly line process, much more automated, blanches and chills the product before sending it into a flow-through freezer unit.

In addition to these basic food processing operations, other departments in the plant take charge of laboratory quality control, warehousing of product and supplies, maintenance and repairs, and the front office operation. The company also has a small experimental farming operation at the plant site and there is a small building nearby which serves as the offices of the field staff. Ancillary operations at the plant site include a cafeteria for employees, operated on a concession basis, and a plant for the construction of pallets, operated by an employee-owned cooperative organized by ALCOSA. In the center of the town five miles away is a processing shed where most of the okra and brussels sprouts are cleaned and trimmed. This operation is subcontracted by ALCOSA to a local entrepreneur.

The plant employs between 125 and 300 people, depending on the season. The subcontractor's processing shed, during the six months of the year that it is in operation, normally employs between 25 and 60 people.

At one time, ALCOSA leased extensive land in the area and planted most of its own broccoli, brussels sprouts, and hybrid cauliflower. These farming operations employed up to 400 people at their peak, but were gradually phased out as small farmer production increased. The last of ALCOSA's farming operations were closed out in April 1980.

During its first years of operation, ALCOSA had three principal types of farming operations supplying its raw materials: its own farms, middle sized farms operated by agricultural entrepreneurs, and small farms in the highlands. The first of these sources to be developed were its own farms, and there is some evidence that ALCOSA at one time intended to depend primarily on its own farming for its raw material. Soon, however, it began to rely more on its outgrowers. The first type of outgrower developed by ALCOSA were nontraditional commercial farming entrepreneurs, many of whom carried out other business enterprises in addition to their farming.

This growth of sophisticated farmers was the easiest group for ALCOSA to persuade to undertake new crops and new farming techniques, but in the slightly longer run they have not proved to be a satisfactory source of supply. Most of them had no previous experience in vegetable production; none of them had previous experience with ALCOSA's crops. In some cases, productivity was lower than anticipated, reducing farmer's anticipated income. In other cases, the proportion of the crop meeting ALCOSA's quality standards was very low, and disputes over these standards and ALCOSA's discounts for poor quality were commonplace.

Meanwhile, experience with small farmers in the highlands (begun on a pilot basis in 1976) was proving more satisfactory, and these purchasing operations have been continuously expanded. As a culmination of this switch in supply sources, by 1980, 95 percent of all cold weather crops were purchased from small farmers in the highlands. Okra, unsuited for production in the highlands where the small farmers are concentrated, continues to be produced by middle sized farmers elsewhere.

#### ALCOSA's Plant Employees

The nature of processing plant production is inherently seasonal, but ALCOSA has made great efforts to spread the processing throughout the year, primarily through the mix of cold and warm weather crops and the control of plantings. The goal of year-round production has become more of a reality each year, as total production in the plant has increased toward plant capacity. In addition, the plant has been able to reduce fluctuations of regular full-time employment by subcontracting much of the cleaning, cutting and classifying work. Thus, brussels sprouts and okra are preprocessed by a subcontractor in the town of San José Pinula, while broccoli and cauliflower are cut and classified by subcontractors or the farmers themselves at the highlands buying stations.

Nevertheless, some fluctuation of employment levels is inevitable in the nature of the business, and ALCOSA has recently employed from a minimum of 150 to a maximum of 300 in plant personnel. As a result, layoffs and rehires are common occurrences for the employees through the first year of employment, until they acquire enough seniority to avoid normal seasonal layoffs. Fortunately, San José Pinula is also the site of a large flower seed producing company, another highly seasonal operation, but one whose employment rhythms are somewhat complementary to those of ALCOSA. Several of the ALCOSA employees interviewed had worked for the flower seed producer in the past and indicated that they would do so again if necessary.

As a matter of deliberate company policy, ALCOSA prefers to hire women for its in-plant positions. This is of course traditional in the food processing industry, but the policy is also the result of observations of the relative reliability, dependability and job satisfaction of male and

female workers made by ALCOSA management early in its Guatemala operations. The large majority of its employees have consistently been paid at or near the legal minimum wage, currently 50¢ per hour. Specialized laboratory, supervisory, or maintenance workers, about half of whom are women, earn more than this. Payment of the minimum wage and of legally required fringe benefits such as social security insurance, vacation pay, and "seventh day pay" (payment of a seventh day of wages for each six days worked) is adhered to only by large employers in Guatemala. As a result, the employees of ALCOSA and the other plants in the San José Pinula area earn considerably more than most local workers employed in farm, domestic, or small business operations. The women employed directly by ALCOSA, therefore, earn as much as the highest paid male blue collar workers in the area, and considerably more than female domestic workers or market traders, the only other two paid occupations available to women in the area. In sum, the payment to women of the same minimum wage as men, though required by law, is neither customary nor expected in San José Pinula or other small Guatemalan towns. ALCOSA and the other plants that hire women on these terms are thereby transforming local attitudes about the nature of women's work and women's just compensation. (See Ch. 7.)

#### ALCOSA's Raw Material Purchasing Program

During the 1980 growing season, ALCOSA purchased its cauliflower, broccoli, and brussels sprouts primarily from small highlands farmers, about 2000 of them. To receive this produce, ALCOSA operated up to 17 buying stations in the Department of Chimaltenango, Sacatepequez, and Solola. About half of these buying stations are primarily cauliflower purchasing centers which have been operating since 1977 or 1978. The others specialize in broccoli, a crop which was previously grown on ALCOSA's farms or purchased from larger farmers. These broccoli stations were opened in 1979 at the earliest, and many first began operations in 1980.

These buying stations are primitive open-sided sheds, wooden posts holding up corrugated metal roofs. They provide a sheltered place for classifying and weighing each farmer's deliveries during the rainy season. One corner of each shed is usually walled off to form a lockable room where the scale, the writing table, and other minor supplies are stored. During harvest periods, ALCOSA employees operate each shed two, three, or four times a week, depending on the stage of the harvest and the number of the farmers serviced in the area. On such buying days, trucks bring empty baskets from the factory, farmers classify and pack their products into these baskets, and the product is weighed. Once weighed, the farmer receives a receipt for his delivery and the product has thus been formally transferred to ALCOSA.

Although some elements are standard--the baskets, the weigh-in, the receipted purchase--buying stations and buying procedures vary throughout the region. Where a cooperative or some other agency already owns a suitable

building, such as a warehouse, ALCOSA uses the facility that is available. Thus, in Santiago Sacatapéquez the buying station is a much larger and more elaborate building erected by the cooperative on land provided by the municipality. Likewise, classification of the cauliflower is sometimes left to the farmers themselves, as in Chimachoy, and sometimes carried out by subcontracted employees, as in Patzicía. Such flexible arrangements depend on local farmer preferences and ALCOSA's experience with the reliability of the farmers' classifications in each locality. To operate these buying stations and to coordinate the plantings and purchases, ALCOSA employs a field staff that in 1980 reached a peak of 18 persons, one director of crop operations, one chief agronomist, two agronomist's assistants, and up to 14 local assistants. It costs ALCOSA approximately 3¢ a pound of purchased product to pay the wages and travel expenses of this field staff, to maintain the buying stations, and to transport the product from the buying stations to the plant. As a contextual figure to help judge the magnitude of these costs, ALCOSA pays farmers 5-6¢ per pound for these products, depending on the product type and quality level.

Farm production in each zone begins with a series of visits by the agronomists and their staff a month or two before the highland dry season comes to an end in late May. In these meetings, agronomists try to recruit farmers to produce cauliflower and broccoli for ALCOSA. Up until July 1980, ALCOSA has never had enough product to operate at full capacity, so the basic task of the agronomists at the beginning of every season has been to recruit more outgrowers and to convince continuing farmers to plant more acreage in the coming year. An important aspect of this recruitment has been ALCOSA's willingness to provide seeds, transplantable seedlings, fertilizer, and insecticides as interest-free loans against the harvest deliveries. Farmers recruited by ALCOSA are signed to contracts, which specify how many cuerdas (quarter acres) of each product the farmer will transplant each week throughout the rainy season. The growing time necessary from transplant to harvest varies considerably according to the micro-climate of each town, but ranges approximately from two months for hybrid broccoli to three months for native cauliflower, up to four months for brussels sprouts. ALCOSA tries to organize farmer contracts so that all farmers in a given zone will be in production at the same time, and so that, on the other hand, all zones will not be in production at the same time. The unattainable goal is to try and insure that there is a daily equilibrium of production throughout the harvest season to minimize extreme daily or weekly fluctuations of incoming raw material at the processing plant.

Once a farmer has been signed to a contract, the agronomist calculates the amount of inputs that should be necessary and offers to sell the farmers that amount of the various inputs as a production credit. Only recently had ALCOSA begun to offer so much credit, and even so, not all inputs are offered to every farmer in each zone. When the agronomists do offer credit, however, most farmers choose to accept it. Those who do



not take credit from ALCOSA either finance their own production or use the ALCOSA contracts as evidence of an assured market in their application for credit from the large regional coops or from BANDESA, the government's agricultural development bank.

ALCOSA contracts are useful to farmers seeking production credit, because they demonstrate the farmer already has an assured market at a fixed price for his contracted acreage. Terms of these contracts include the description of quality standards, the assurance that ALCOSA will buy all production from contracted acreage that meets these standards and the price ALCOSA will pay. The details of ALCOSA's mechanisms for penalizing low quality are spelled out. For cauliflower, ALCOSA agrees to purchase second quality cauliflower (at 5¢ per pound instead of 12¢) up to an amount not to exceed 10% of first quality deliveries. For other crops, ALCOSA does not pay for less than first quality products, and the contracts describe how ALCOSA will sample the delivered product and discount its contract price by the percentage equivalent to the percentage of substandard product in the samples. All contracts also contain a clause, most important from ALCOSA's point of view, that binds the farmer to deliver to ALCOSA the whole of the harvest from contracted plantings.

As farmers discovered for the first time in 1980, however, the contract contains no clause binding ALCOSA to purchase as unambiguously as the clause that binds the farmers to sell. That is, the contract fixes the price that ALCOSA will purchase the product from contracted acreage if it is transplanted at the contracted time but ALCOSA's obligation to purchase the entire harvest on such terms is never explicitly stated. Despite this loophole, it had always been assumed by farmers and their credit suppliers that ALCOSA's contracts were of the assured purchase, fixed price type. This assumption was never called into question before July 1980, because ALCOSA had always purchased all the high quality product it could get its hands on. Disputes between ALCOSA and farmers over ALCOSA's purchases had arisen in the past with some frequency, especially among middle size and larger commercial farmers, but the focus of the dispute had always been on quality standards and quality discounts.

#### "The Crisis" of 1980

On July 21, 1980, as early plantings of cauliflower in Chimachoy, Patzicia and other zones were building to their harvest peak, ALCOSA abruptly suspended its purchases of that product, an action that immediately plunged most of its cauliflower outgrowers into panic and financial crisis and one that fundamentally altered the nature of the relationship between ALCOSA and its outgrowers, and dramatically transformed ALCOSA's social and economic impact on the cauliflower growers then in production. Why would ALCOSA do such a thing? What compelled its managers to take such a drastic and potentially dangerous decision? To answer such questions, it is necessary to understand the background conditions that so constrained

ALCOSA management that it felt it had no other choice.

The fundamental problem ALCOSA faced was one of plant capacity. Since ALCOSA began processing cauliflower, broccoli, and brussels sprouts in 1976, it has been able each year to more than double its previous year's purchases of these products. Despite such an expansion, ALCOSA's original production equipment was of such a size that its capacity had never previously been a limiting factor in management decisions. True, during peak production periods daily deliveries had occasionally exceeded daily freezing capacities, but prior to the 1979 season the cold storage warehouse had been greatly expanded and the freezing crews switched over to three-shift operation. During harvest peaks in 1979, therefore, the plant had ample flexibility to handle such occasional spurts of excess raw material deliveries. Production goals for 1980, based primarily on Hanover Brands' marketing needs in the United States, called for another large expansion in total production, cutting back slightly on cauliflower production but compensating for this with very large increases in the other crop programs. In every previous year, ALCOSA had easily exceeded its total production goals, and it was expected that another successful year in 1980 would finally bring production up to the desired near-capacity levels. By thus ending, in a sense, one aspect of the start-up phase on its operations, ALCOSA would be finally realizing the efficiencies and economies that management had planned into the plant's production designs.

As in every previous year, management made several changes to improve and expand its crop production and its outgrower programs. In April of 1980, the last of its own farms was shut down, and the long planned transition from internal sources of supply to outgrowers was thus completed. The decision was also made to switch the emphasis of its broccoli program from urban based and highly sophisticated medium size farmers to the indigenous small farmers of the highlands. Since broccoli was a crop that ALCOSA was essentially introducing to Guatemala for the first time, the company had initially been reluctant to involve the more "traditional" highland small farmers in its production, depending instead on the company's own farms and those of other urban businessmen who readily agreed to try a new crop on their family's lands if the profit potential appeared attractive enough. By 1979, however, most of this class of farmers had been alienated from ALCOSA by ALCOSA's prices, which these farmers felt were not high enough to compensate for all the wage labor necessary on these labor intensive crops, and by the company's high quality standards and consequent discount percentages on purchases of lower quality harvests. ALCOSA, meanwhile, had conducted pilot tests of groups of small highland farmers and had concluded that they were the best potential sources of broccoli after all, because their previous vegetable experiences and their constant attention made them better producers of high quality broccoli than the larger absentee farmers, despite the latter's greater sophistication and higher technologies. Another important consideration, it may be presumed was ALCOSA's discovery that the same broccoli prices that drew complaints from larger farmers were eagerly sought after by

smaller farmers.

Because it was phasing out its own farms and cutting back on larger outgrowers, and also because it wanted to slightly reduce the quantity of highland cauliflower it would purchase, ALCOSA decided to depend entirely on the highlands villagers for its broccoli program. The agronomists in charge of the field staff were instructed to go all-out in the most rapid possible expansion of the broccoli program in the highlands. In this effort, they were extraordinarily successful. Between March and May of 1980, they doubled the number of participating zones and highland buying stations, almost doubled the number of contracting farmers, and convinced many of the existing cauliflower growers to grow broccoli as well as cauliflower. One of the primary tools they used to attract these new farmers was the expansion of ALCOSA's credit program, adding the farm input most sought after by farmers, fertilizer, to the list of ALCOSA-provided commodities. During these three months, more than 1300 farmers, most of them new to ALCOSA, were convinced to commit significant portions of their available land and labor resources to produce a crop which few of them had ever seen before and which (as several of them said in their interviews), "we can't even pronounce."

Although they did not mention this when recruiting farmers, ALCOSA agronomists calculated, based on their previous experience with larger farmers, that these first-time broccoli farmers would be able to produce only about half of the 2,000-3,000 pounds per cuerda (8,000-12,000 pounds per acre) that experienced broccoli growers in Guatemala were easily able to produce.

Aided by generally excellent weather conditions (although in Chimachoy and a few high-elevation zones, torrential rains and a hailstorm damaged many newly transplanted fields), the new broccoli farmers nearly doubled ALCOSA's projections. The impact of this increased productivity was not felt at first, however, as the plant began processing broccoli in early July. Agronomists had contracted with farmers to begin transplanting broccoli in the first week of May, and for an approximately equal acreage of broccoli to be transplanted each successive week through the month. These plans were at least a little optimistic, since the rainy season cannot be routinely expected to begin quite so early. In 1980, in fact, it began slightly late--not until the fourth week of May. Most farmers therefore put off transplantation of their first broccoli crop until the first rain, with the result that the entire month's contracted crop was planted in the same week at the end of the month.

At the plant, new employees were hired in early July in anticipation of a long season of near capacity production. Ten days later, management was almost ready to lay off these new employees; the broccoli and cauliflower were trickling in in disappointing quantities. Then, as if somebody had flipped a switch one day in mid July, the plant was suddenly swamped with

broccoli. And once it started washing in, the flood of broccoli just wouldn't stop. Up until the days it actually started showing up at the buying stations, no one in ALCOSA had anticipated such a flood of broccoli. The company's chief executive officer, Mr. Victor Schultz, who had only one week before described to us his plans to cut back on cauliflower production and expand broccoli farming in its place with these words, "Those Indians up there will bury us in cauliflower if we let them," found that they had buried him alright, but in broccoli.

Finding itself forced to discard purchased products by the truckload (\$350,000 worth of discarded raw material in the month of July alone, according to Mr. Schultz) ALCOSA was forced to either divert the flood of raw material or go bankrupt. It first halted all purchases of okra commenting that the harvest season for that crop was almost entirely over anyway (a claim that was forcefully and almost violently disputed by groups of medium sized okra growers in Zacapa). Still the product flooded in with daily deliveries equivalent to double the plant's daily capacity. Three days later, top management decided to suspend all cauliflower purchases within 24 hours and to continue the suspension for an indefinite period of time. Managers and agronomists defended this decision on three grounds: 1) they had no choice, the only other alternative was bankruptcy; 2) it was better to suspend purchases of cauliflower than **broccoli**, since cauliflower could at least be sold on local markets; 3) the cauliflower then being delivered was "out of contract" since written contracts (distributed in May) called for transplantings to begin in May with harvests expected 90 days later, in August.

The first of these factors, the fear of bankruptcy, seems realistic; in any event, it could not be evaluated without access to the books of both ALCOSA and its owner, Hanover Brands. It is also true that there was undoubtedly a better possibility for cauliflower sales on the local market than for sales of broccoli, but the market price of cauliflower fell to levels below the cost of transport immediately after ALCOSA's suspension of purchases and did not rise again to levels equitable to the farmer until early October. The final factor in the decision, ALCOSA's belief that the cauliflower being delivered was "out of contract," and that ALCOSA was therefore technically not breaking its contracts, because the farmers had already done so--this claim was the most interesting, and the dispute between ALCOSA's field employees and farmers over this issue most revealing.

Undoubtedly most, though not all, of the cauliflower being delivered in this period was technically out of contract, that is, transplanted without written authority either on unauthorized excess acreage or at unauthorized dates. Farmers widely disregarded these contracts, and in a sense, past ALCOSA practices had conditioned them to do so. For one thing, the huge expansion in the number of small farmer growers had caused a backlog in the paperwork of preparing these contracts, causing long delays

between the time when the agronomist and the farmer had discussed their plantings and the time when the prepared contracts were actually ready to be signed. Thus, the very earliest plantings, which had been especially encouraged by the agronomist, were made in April by farmers who agreed to irrigate by hand with sprayers, and none of these verbal agreements were reflected in the contracts which finally appeared in May. The higher volume of contracts and paperwork caused confusion as well as delay; all of the contracts for Chimachoy, for example, were lost with a change of personnel and a second meeting of farmers had to be called to begin the process all over again. As the magnitude of the paperwork problems became increasingly evident, agronomists urged farmers to start their seedbeds and get on with the plantings, figuring that the paperwork could always be caught up on later.

More important, though, than these paperwork snafus in causing farmers to ignore the transplant dates and acreages of their contracts were past ALCOSA practices based on their continuous search for more raw materials. In all previous years, ALCOSA's problem was lack of raw material, not over-supply, and company representatives had always been happy to purchase all of the cauliflower they could get their hands on, regardless of the contractual status of the source. Thus, a majority of the farmers had developed a habit of planting cauliflower beyond the contracted acreage, intending to sell it on the fresh market if the prices were high enough, or to ALCOSA if they were not. Similarly, if local market prices declined, ALCOSA **contractees** aided their relatives and neighbors by presenting other people's cauliflower to ALCOSA along with their own. In some of the buying zones, a few farmers turned this informal practice into a regular brokerage business, buying cauliflower from others in the community for resale to ALCOSA. We interviewed a few farmers who had only begun to make contracts with ALCOSA in 1980, although they had sold their cauliflower to ALCOSA through intermediaries in previous years when local market prices declined far enough below those of ALCOSA.

Although all these activities are contrary to company policy and although some of them are expressly forbidden by clauses of the contract, in all previous years ALCOSA field employees had been happy to receive this product, and questions were never asked. This year, however, all such practices compounded the oversupply problem and confounded ALCOSA's early attempts to separate out legitimately contracted product from the rest of the cauliflower it was receiving. After the initial suspension, market prices plunged so low that ALCOSA's tentative efforts to reopen purchases in one zone or another were always greeted with a flood of cauliflower that probably constituted everything available in the local area, contracted or not.

The responses of ALCOSA's cauliflower farmers to the company's action varied considerably from farmer to farmer and region to region. Torn between energizing anger and enervating despair, few of the farmers

were able to agree on a consistent course of action towards the company. Aggravating the situation was their fear that the most logical response, collective action to convince the company to resume buying (either through direct negotiations or legal proceedings) would be dangerous in Guatemala's violent political climate. Informal leaders of peasant groups were being gunned down daily in other parts of the country and incidences of such terrorist violence were once again on the increase in the relatively quiet Chimaltenango area. Nevertheless, the farmers of Santiago Sacatepequez, tightly organized in their new coop and reinforced by their influential Swiss advisors, were able to convince ALCOSA management to continue buying at least their first quality cauliflower, which ALCOSA decided to send to its small branch plant for pickling. As word spread through the highlands of Santiago's success, the Indian farmers of Patzicía organized themselves, at first to send representatives to discuss their problems with top management in San José Pinula, then later to "denounce" the company and its principal agronomist before local judicial authorities in their municipality. Farmers in Chimachoy also selected a delegation to go to San José Pinula, but were never able to agree on further action, due primarily to a split between larger farmers who favored conciliation and their poorer neighbors who preferred confrontation.

As the flood of broccoli subsided at the processing plant in mid-August, cauliflower purchases were resumed both in Patzicía and Chimachoy, but at first only top quality cauliflower was accepted, and farmers were advised not to transplant their previously contracted August and September acreages. Tensions remained very high in both communities between the farmers and ALCOSA employees. Tempers sometimes flared, and occasionally farmers and local employees faced each other down with drawn knives and poised machetes. In Chimachoy, somebody tried to burn down the buying station one weekend, an action that was repeated later in another area with somewhat more success. In Chimachoy purchases were soon suspended once more, and steps were taken to sell the buying station and close down operations there, but in late September, after discussion between the top managers of LAAD and ALCOSA, there was a sudden shift in ALCOSA policy toward Chimachoy. Purchases were once more resumed, this time of both first and second quality cauliflower, and plantings were immediately resumed using company-supplied seedlings, and unprecedented generous amounts of production credit.

As he has repeatedly assured individual farmers, the manager of ALCOSA is determined that "this will never happen again." Towards that end, he is making several important changes in ALCOSA's operation. A second freezing line is being installed in the plant before the opening of the 1981 season, financed by a new loan from OPIC. The company also plans to go into the fresh-product exporting business, beginning with snow peas in December of 1980 and expanding from that point on. This expansion would eventually require an ALCOSA subsidiary located in Florida to operate a warehouse and distribution center for both fresh and frozen products to serve the market. This simultaneous operation of a fresh

product distribution operation as well as freezing and pickling processing plants should give ALCOSA more flexibility in finding alternative outlets for excess raw materials in the future.

The company has already fired its senior agronomist for fraud and misadministration. As the principal architect over the last three years of the company's highland crop program, he was chiefly responsible for the uncontrolled broccoli expansion in 1980. By virtue of his visibility as the highest level ALCOSA manager to deal personally with the outgrowers, he was blamed by many farmers personally for their problems. He thus became a scapegoat, and his firing led to an immediate improvement of the relationship between the company and its farmers.

To alleviate some of its paperwork problems, the company plans on working with fewer outgrowers next year. This may be accomplished through attrition, as farmers refuse to sign new contracts as a result of this year's experience, or it may come from cutting back on the number of zones in operation. If some growing zones are eliminated, Chimachoy and Patzicía are prime candidates because, in Mr. Schultz's words: "On a scale of 1 - 10 for causing problems, Chimachoy and Patzicía have always been 9's, and no other zone is more than a 3." Another policy change that has already been implemented is the elimination of the native cauliflower variety, "Chicasanga," from ALCOSA's purchasing programs. Beginning next year, only hybrid cauliflower will be contracted and purchased. This will help the company in two important ways: the product is more acceptable in the American market, and plantings will be easier to control, since ALCOSA is the only source of these hybrid seeds. Farmers in all zones are now ready to make this change, even though the seeds cost more, because they have observed over the past three years how much higher are the yields from these heavier hybrids.

Finally, ALCOSA intends to change its contracts to include a specification of the upper limit of the quantity of produce that it has agreed to purchase. Thus, instead of agreeing to purchase the total quantity produced by, say, 20 cuerdas (5 acres) planted on fixed dates throughout the growing season, they will agree to purchase the product of those 20 cuerdas up to a maximum of, say, 100,000 pounds.

Whether or not these planned changes will resolve the problems of ALCOSA's outgrowing program--and they should at least help reduce the problems--they will alter the nature of the ALCOSA-farmer relationship and affect both outgrowers' attitudes and their farming behaviors. Most obviously, if Chimachoy or Patzicía is eliminated from the program, a social impact study next year would draw very different conclusions than those discussed in this report. This should remind us, and it is well that it should, that ALCOSA is a dynamic, expanding, and rapidly changing organization operating in a potentially very unstable socio-political environment.

Although we have tried to capture dynamic aspects of the company and its social impact, by the nature of the research we must present here something of a snapshot description of a reality that is not only constantly changing, but changing in not entirely predictable ways.



## Chapter 4

### CHIMACHOY

Seventy-five kilometers into the highlands from Guatemala City, on an isolated hilltop not far from the Volcano Acatenango live the 100 families who make up the village of Chimachoy. Nominally a part of the municipality of San Andrés Itzapa of the Department of Chimaltenango, Chimachoy is connected with its municipality by barely passable dry weather tracks through the mountains or by a 30 kilometer detour on the nearest road through the neighboring municipality of Parramos. Inaccessible as Chimachoy is, however, it does have a road in, even if that road is only an upgraded track that runs three kilometers uphill from the dirt road out of Parramos. Over this bumpy route come the trucks, rural buses, and assorted technicians' jeeps that connect Chimachoy with the rest of Guatemala. No other village around Chimachoy has such an access route. Much of Chimachoy's recent growth must be attributed to this relative advantage over these surrounding villages.

Chimachoy is different from its neighboring villages in other ways, too. Among the most important is its altitude, 7,600 to 8,000 feet, which means that its hilltop fields are an average of 500 feet higher than the field of the valley villages all around. This difference in altitude brings with it a corresponding difference in climate. Chimachoy fields are colder during the hot season, relatively frost free during the cold months of November and December, and cloud-covered and moist throughout the dry season. Chimachoy soil is looser, sandier, more volcanic in origin with less clay than the soils of the other villages in the area. Since it has no valley land, very little of Chimachoy's fields are even relatively flat. Under these conditions the loose sandy soil is highly susceptible to erosion, requiring very careful cultivation techniques if it is to be preserved. Because of its topography and unique microclimate, the farmers of Chimachoy have evolved a highly specialized set of farming practices, unlike those of any other in the area.

Chimachoy farmers specialize in producing vegetables. They produce relatively little corn and almost no beans. This in itself would be unusual for a Guatemalan highland village. The most unique feature of their agriculture, though, is their concentration on dry season production, to harvest as much as possible during those high priced months when very few other highland farmers can produce anything at all. This specialized vegetable producing agriculture is what originally attracted ALCOSA to Chimachoy, but as we shall see, it has also presented difficulties for ALCOSA and those farmers with ALCOSA contracts.

The 790 people who live in Chimachoy are almost entirely Indians of the Cakchiquel group. The only exception is one older ladino couple who moved to the area some 40 years ago. Their children speak Cakchiquel, have all married locally, and their grandchildren are so assimilated as to be

indistinguishable from the rest of Chimachoy's population. For all practicable purposes, therefore, Chimachoy must be considered a totally Cakchiquel village. The reader must perhaps make an effort to bear this in mind throughout this chapter. As researchers, we found little in Chimachoy that we thought strange, exotic, or quaint and there will be little in the following descriptions and analyses to constantly remind the reader that Chimachoy is part of the "colorful Indian culture" of the tourist posters.

How do the people of Chimachoy earn their living? From agriculture, almost exclusively, supplemented by the sale of woven goods. Chimachoy is usually homogenous in this regard, unless the contemporary literature about this subject is misleading or now out of date. We found no family in Chimachoy that does not farm its own piece of land independently, and most of this land is the property of the farmer, although many plots are rented. That is to say, Chimachoy has no "landless" agricultural workers.

This has not always been the case. As recently as a generation ago, almost all the male inhabitants of the village worked on coffee plantations in the surrounding valleys. The land presently worked by villagers, and indeed the land under the houses that now make up much of the village center, was concentrated in a few large estates. Villagers were allowed to work a parcel of land in the village in return for labor on the owners' coffee estates elsewhere. The village land itself, however, has never been appropriate for coffee farming. In those cases where it was incorporated into coffee estates the land around Chimachoy was used as "annexes" to the estates, marginal land in which the estate workers were permitted to grow their corn and beans. Although these lands were not directly affected by the land reforms during the revolutionary period, 1944-1954, large landowners have since that time thought it prudent to parcel out their holdings and divest themselves of this land which, in any case, they never directly utilized. Typically, this process occurs as part of a generational transition in the estate-owning family. In the villagers' version of these events, after the death of the "older patron," his sons no longer wanted this land, so they parceled it out. Many of these parcels have been bought by villagers themselves, helped in some cases by the Uleu Foundation, a land-distributing offshoot of the Berhorst Clinic, or one of the regional cooperatives. In other cases, the original family has permitted villagers to purchase parcels with payments stretched out over ten years. When owners were not willing to offer terms or when outside agencies could not help with the financing, such parcels were bought by small investors, most of whom reside in Guatemala City. Generally, the land now owned by the small investors is available to villagers for rent at the prevailing rate of \$10 per cuerda (approximately one-quarter acre) per year.

This process of land divestiture and distribution has by now been most thorough. Whereas 25 years ago almost all the land of the village was in the hands of large estates, only three sizeable pieces of land still

remain undivided, and two of these three parcels are now for sale, with their owners in a process of active negotiation with the villagers who have long tilled this land and now wish to purchase it.

Except for the two large parcels purchased and subdivided by the Uleu Foundation, this land distribution has not been part of any planned land reform, but simply the result of new generations of landowners shifting their investment priorities in response to their perceptions of changes in Guatemala's political and economic conditions. Fortunately for the villagers, it has been easier and no less profitable to the large landowners to sell parcels of land to the villagers who have always tilled them, but their transition from tenants to landowners has put a terrible financial strain on a generation of village farmers. Purchase of this land, even with ten years of payments, requires the would-be purchasers to achieve levels of annual cash income that few in the past had ever accomplished. Those who broke through to land ownership earliest, or those who perhaps had a slightly larger asset base to start from, have managed the transition most easily and are now in a position where their acquisitions push them past the point of pure "family farmer" to the point where substantial portions of their land must be rented to others or worked with hired labor. A few others, on the other hand, have as yet been unable to purchase even a small piece of land and can plant their crops only as renters. Fortunately for them, the transition from semi-feudal labor requirements to pure cash rent has lowered the real cost of the still plentiful land available for rent. That is to say, nobody in the village is worse off than they were before this local land tenure transition, but the economic advance of some has been much greater than others, creating an incipient division between those in the village who have little and those who have even less.

The actual stratification system in the village has three somewhat distinct levels, all of them variants of what used to be the middle stratum of the traditional highlands stratification system that included landless farm workers at the bottom and large landholders at the top. The lowest stratum includes those who plant their own crops but also work as farm laborers for others in the village to earn extra income. This stratum includes those in the village who are poorest, less sophisticated, and least likely to speak Spanish; it is therefore likely that they are under-represented in our sample, but they nevertheless make up 50 percent (15 to 30) of those interviewed. We estimate that these poorer farmers make up 65 percent of the total village population. Although some of these farmers occasionally hire farm laborers of their own, especially to help with land preparation, most of them do not.

The middle stratum includes those with enough land so that they never have either time or need to work for others, but only occasionally hire farm laborers to help them in their work. This is the smallest group in our sample, consisting of only 17 percent (5 to 30). They probably make up 20 percent of the village population. The wealthiest stratum in Chimachoy includes those with large enough farming operations to require

outside help in almost all crops. This group is probably over-represented in the sample, in that almost everyone of such stature in the village was interviewed, and such farmers make up one-third (10 of 30) of the survey respondents. Their proportion of the village population is probably no more than 15 percent. To give an idea of the size of these larger farm operations, the median number of cuerdas planted was 40 or about ten acres. The size of actual land holdings, as opposed to plantings, would be considerably less, since land used for vegetable farming is planted at least two times a year. Within the group of larger farmers, there is one man who perhaps should be considered a stratum unto himself. This is Don Mateo Quejay, a man believed in the village to own more than 300 cuerdas. (All names have been changed.) The former overseer of the largest local estate for 35 years, Señor Quejay was the only villager to acquire land during the revolution. From that base, he has been able to expand continuously. He is a major farm employer in the village, since he and his sole surviving son (who is physically handicapped) need to hire help every day to keep up their extensive farming operations. Partly because of his outstanding wealth and partly because of his former occupation, Señor Quejay is not well liked in the village. He has worked closely and cooperatively with ALCOSA, and the company has built its buying station on his land. The company's efforts to have him help organize production in the village have probably therefore done the company more harm than good in its efforts to increase outgrowers' cooperation.

#### ALCOSA's Operations in Chimachoy

ALCOSA arrived in Chimachoy in 1977, a year after the initial experiment in Patzicía. At the time of the AID evaluation of the ALCOSA sub-project that year, these were the only two buying stations in operation. At that time, ALCOSA's field staff of one, the para-agronomist Pablo Duches, would arrive in the village twice a week to spend most of the day with the 30 or so farmers then under contract. He would discuss the progress of their present plantings, encourage them to keep making new plantings, weigh and accept all of their products. He would bring with him the cash to pay for their cauliflower he purchased in his last visit, and happily bought everything not infested with worms at the high fixed price of 6½¢ per pound.

ALCOSA still buys cauliflower in Chimachoy twice a week during the harvest season, but little else has remained the same. Now, new ALCOSA field personnel work closely with different key farmers, use higher quality standards and tighter purchasing procedures to cope in somewhat inefficient but bureaucratic fashion with the hundreds of farmers from Chimachoy and elsewhere who now bring their cauliflower to the new and expanded buying station. From the farmers' point of view, everything about their dealings with ALCOSA has deteriorated. Although the price for first-quality cauliflower has risen steadily, they do not believe the increase has been sufficient to offset procedural changes that reduce the proportion of their



village have been the victims of two separate schemes to defraud them-- schemes that led to the dismissal of two low-level local employees in 1979 and of the chief agronomist in 1980. The fraud of 1979 consisted of a systematic skimming of a small percentage from farmers on every delivery. The scheme was a collaborative effort on the part of two local farmers who were employed by ALCOSA in 1978 and again in 1979 as local assistants to receive, weigh, and record the produce delivered in Chimachoy and other nearby buying stations then in operation. The fraud apparently netted these two men approximately \$100 a week throughout the harvest season; an astronomical figure in an area where the farm wage is \$2 per day. The scheme was long suspected by farmers who finally united to write a collective letter to the company denouncing its employees. After an investigation of the farmers' charges, the company dismissed the two men involved, who remain as farmers in Chimachoy growing cauliflower for ALCOSA.

The second fraud, discovered by ALCOSA management in 1980, involved kickback arrangements between the company's chief agronomist and merchants who supplied the inputs that ALCOSA distributed in its credit sales to farmers. The chief agronomist's responsibilities included recommending appropriate types and levels of fertilizer and insecticide, then supplying farmers with enough inputs to follow his recommendations. It was his practice in dealing with farmers who wished to receive their inputs from ALCOSA, to calculate the appropriate quantity needed based on each farmer's contracted acreage, then force farmers to receive the full quantities of recommended products. The resulting artificially elevated dosages increased farmers' fertilizer costs by 50 percent and insecticides costs by 150 percent over the treatments recommended by research agronomists at the scientific and Technical Institute for Agriculture (ICTA) on the basis of experiments conducted in Santiago Sacatapéquez and other highland villages. This manipulation of ALCOSA's credit system and technical assistance program for the private gain of the company's agronomist is an acid that has already badly corroded the company's outgrower crop programs. The raised costs are sufficiently higher to reduce or eliminate farmers' net profits on cauliflower cultivation, causing some farmers who have attempted to follow the recommendations to drop out of the program in search of more profitable vegetable markets elsewhere. Farmers with enough experience in cauliflower production to recognize the recommendations for the bad advice that they are attempt to avoid the excessive costs by using a part of the excessive inputs on additional uncontracted acreage. The result is a cynical disregard on the part of experienced cauliflower outgrowers of both the company's contractual controls over plantings and its attempts at technical assistance.

Efforts of ALCOSA field employees to defraud the farmers are but a somewhat extreme reflection of the general attitude of the field staff towards their Cakchiquel outgrowers, at least under the leadership of the former chief agronomist. In the view of this man who was for three years

responsible for ALCOSA's highland crop farmers, small farmers in general were more ignorant of modern farm practices and more deceitful to the company than their larger counterparts. And the more communications problems he had with a group of farmers, the more contemptuous he was of their farming abilities and the most distrustful of their intentions. His attitude was most negative, therefore, towards those least assimilated Cakchiquel farmers whose cultural perspectives least resembled his own and whose abilities to understand and speak to him in Spanish were most rudimentary. Because Chimachoy is an isolated village instead of a municipal center, its population is among the least assimilated of any of ALCOSA's buying zones. In patterns of dress, demeanor, and speech, Chimachoy residents behave less like urban Guatemalans than do Cakchiquel speakers from the larger municipal centers. With fewer infrastructural elements available than in town centers (power, water, farm roads accessible for pick-up trucks), the visible standard of living in Chimachoy, even among the uppermost stratum with its rapidly improving housing and accumulation of landed capital, is visibly poorer and apparently more "backwards" than that of town residents. Perhaps for this reason, or perhaps because (as the Cakchiquel agronomist from the Uleu Foundation believes) the long experience of these cauliflower specialists makes them less malleable than farmers elsewhere, the chief agronomist and his assistants have been more openly scornful in their dealings in Chimachoy than elsewhere. Unfortunately but not surprisingly, the pridefully upwardly mobile young Cakchiquel men that ALCOSA has employed as field assistants to the agronomists have quickly adopted their superiors' attitudes. The present resident assistant in Chimachoy, for instance, expressed in his interview a most vehement negative appraisal of his neighbors, too uncooperative and uneducated to "better themselves," as he has, through off-farm employment.

Probably due to the changed field personnel, but perhaps because of other factors as well, the observed interactions between field employees and farmers in Chimachoy have taken on a completely different character than those observed in 1977, and much more so in Chimachoy than in Patzicía. Observations this year revealed a pattern of interaction that is an extreme variant, almost a caricature, of inter-ethnic interactions within traditional Ladino-Indian relationships in Guatemala. The relationship has an exploitative core in the employee's defrauding of the farmers. Their relation is expressed in traditional patron-client format in which the ALCOSA employee patron talks down to farmers as if they were an especially stupid elementary school class, repeatedly asserts that his only interest is in the farmers' welfare and that all his actions are motivated by this concern, attempts to motivate farmer cooperation with pep talk statements that are meaningless at best, mendacious and manipulative at worst. Farmers respond in the traditional manner of clients, alternating between cynical assertions of their total agreement, cooperation, and satisfaction and individualized small complaints or pleas for special favors. In such a pattern of interaction, each side discounts what the other side says, and the resulting communication gap has made it very difficult to maintain a workable business partnership as the size and complexity of the operation has increased, creating an

ever-increasing need for better and more efficient communication of the constantly changing details of farm production and processing plant requirements. Discussing their perceptions of the communications problem, both the agronomist and the farmers repeatedly used the same formulation of the problem, "I tried to tell them . . ., but they don't pay attention (no prestan caso)."

The ALCOSA employees believe that their relationship with the farmers is one of mutual economic benefit, and that the farmers would benefit even more if they would only cooperate more fully. The farmers, on the other hand, believe that the relationship is essentially exploitative, with either the company or the employees (they are not sure which) reaping benefits at their expense. From the farmers' point of view, if they followed the employees' recommendations more closely they would only increase their own disadvantage, for instance by spending more on insecticide bought from the company when their product is already sufficiently insect-free.

For both sides, the relationship is so fraught with problems that it is held together only by absolute mutual economic need. It appears to be the case that ALCOSA has enough cauliflower producers so that it no longer must continue in Chimachoy. That being the case, it is likely that the result of this winter's scheduled re-evaluation of the Chimachoy buying program by ALCOSA will probably result in the closing of the Chimachoy buying station next spring. The farmers also, in their survey interviews, expressed a desire of the majority to quit the program, although the preference to continue with ALCOSA or not was split along economic lines, with the upper stratum preferring to continue and those below preferring not. When ALCOSA returned offering new contracts a few weeks after the survey was completed, however, those who signed up included all the farmers in the survey who said that they would not. They explained themselves saying that they don't like to work with ALCOSA, but that until some equally large alternative market comes along, they have no choice. Others stated that they rejoined the program to get the farm credits, because they feel that ALCOSA owes them these inputs due to the losses the farmers suffered this summer. Despite the contracts, they said, they will sell their harvest on the fresh market instead of to ALCOSA so that the company cannot collect these credits. If any significant proportion of the ALCOSA farmers follow through on their expressed intention, it will make it even more probable that the results of the company's "re-evaluation" of Chimachoy will be a decision to close down.

Despite the presently deteriorating relationship in Chimachoy, the longer-term impacts since ALCOSA began working there in 1977 have affected most aspects of village life, and the widespread change that has occurred is largely positive, both from the point of view of local farmers' values and aspirations and from the point of view of AID's congressional mandate. Neither of the other two agricultural sites has changed as rapidly as Chimachoy, nor as directly due to ALCOSA's influence. In the rest of this chapter, we will attempt to describe some of the most important areas of



qualitative impact on the agricultural economy of the village, on its community structure, and on its individual residents and their households.

### Agricultural Impacts

In 1979 and early 1980 the most obvious impact of ALCOSA on agricultural practices in Chimachoy was the almost complete transformation from a diversified producer of vegetables to a cauliflower specialist. Even with greatly reduced planting due to ALCOSA's capacity problems in 1980, the farmers in our sample planted far more cauliflower than corn and more than ten times as much cauliflower as the nearest competing non-ALCOSA vegetable, squash. (See Table 4-1)

With continued plantings of this much cauliflower, agronomists worried about the dangers of monocultivation, increased populations of more resistant diseases and insects. There was also the economic danger of dependency on one crop and one purchaser. The Uleu Foundation staff warnings about the dangers of this dependency went more or less unheeded, because no farmers felt able to switch from ALCOSA cauliflower to less convenient and less profitable (or at least less certain) markets.

But then ALCOSA suspended its purchases in Chimachoy, and the lesson was effectively, if painfully, learned. No matter what the future relation between ALCOSA and the village, monocultivation will never again be so dangerous. ALCOSA is deciding between encouraging brussels sprouts production in the village or pulling out altogether. Farmers have begun working with the regional cooperative in Chimaltenango to arrange weekly transport from the village to the new CECOMERCA vegetable marketing project in Patzicía. (See Chapter 5 for more details of this new operation.) Other groups of farmers, some of them working with Uleu agronomists, have already begun to make tests with previously unfamiliar cultivations, chiefly wheat and soybeans, but also locally exotic vegetables. Another group has already begun large-scale plantings of snow peas, plantings reflected in Table 4-1. ALCOSA has agreed to buy these, probably as a result of LAAD's intervention, but the farmers are also looking for other alternative markets. In other words, monocultivation was a dangerous negative impact in July of 1980, but by October the same year, this was no longer the case.

The farmers' response to the cauliflower purchasing suspensions of the past summer and to the threat of ALCOSA's abandoning the village do indicate some of the ways in which their views on agriculture have been changed as a result of their years with ALCOSA. Nobody has any interest in returning to the tiny scale of vegetable production for the local market. All are searching for some alternative market to ALCOSA that will allow them to continue growing and selling large quantities of higher-priced vegetables. Their abilities to carry out commercial vegetable production have increased along with their desires to do so. In the 1977 study, reference was made to the contacts that Chimachoy farmers had made in the Guatemala City terminal

market with small vegetable producers elsewhere in the country. This year we observed community leaders using these contacts and others they have developed with various agricultural promotion programs (World Neighbors, Uleu Foundation), various cooperatives, the government agency for cooperative development, and other agencies like Caritas and the Subcommittee for Highland Development to participate in a rural grapevine that provided information about almost all of the potential commercial purchasers of Chimachoy products. As in 1977, farmers used their access to us on the research team to develop still other potentially useful contacts and sources of information. In fact, an organized group who wanted to purchase land to cultivate cauliflower and snow peas used their contacts with us to introduce themselves to LAAD and, through LAAD, to GUATEXPRO, the government export promotion agency.

Their experience with ALCOSA had given them an increased sophistication about commercial agriculture and about the requirements of such markets, know-how that increases the probability that they will be able to find complementary commercial markets to ALCOSA.

Also increased in sophistication was their knowledge of a variety of types and brands of commercially available fertilizers, insecticides, and even adherents. This was a large advance over their almost ritualistic dependence on a few proven products in 1977. Although they unanimously denied that they'd ever received any agricultural help or advice from ALCOSA agronomists, this must be understood as a reflection of their feelings toward the ALCOSA field employees, rather than an accurate appraisal of what they have actually learned from ALCOSA. For one thing, ALCOSA has introduced three new crops, broccoli, brussels sprouts, and snow peas, and a wholly new range of chemical inputs. Of the new crops, only snow peas has so far proven successful in Chimachoy, but because of its problems with the village and high demand from other highland farmers for these lucrative contracts, ALCOSA has been most reluctant to permit Chimachoy farmers to grow this particular crop.

### Economic Impact

The most impressive change between the village of Chimachoy in 1980 and the village as it was in 1977 is simple economic growth. The town has many new houses of formal construction, a new church, a new health post, a new community meeting hall, two new stores, and a new tortilla mill. There has also been a decided movement in residential patterns, from generally "informal" houses (built of cane and straw) scattered among the fields to "formal" houses (built of wood or cement block with metal roofs) that have begun to line the road through town. With corn-stalk fences along the roadway and barbed wire or metal gates, Chimachoy has taken on the appearance of a small Guatemalan town instead of a typical village consisting of a scattered collection of houses.

Since the town has no economic base besides agriculture, and since almost every farmer in town has become an ALCOSA outgrower, this recent spurt of growth must be attributed to ALCOSA, the town's only significant source of income. As Table 4-3 indicates, profit levels from cauliflower production are no longer so high as they once were, even without taking into account this year's extraordinary losses. Yet even though their yields and net cash incomes (excluding imputed wage costs) are lower than the other two zones, even the poorest Chimachoy farmers now cultivate more land than their economic counterparts in Patzicía and especially Santiago. In their survey interviews, both men and women, whether rich or poor, denied receiving any significant increase in income since ALCOSA came to town; we do not take these responses too seriously. Such is the usual result of surveys that inquire into peasants' household finances. Like the agents from IRS, we place more confidence in the visible evidence of accumulated wealth, the new or improved stores and houses, the newly purchased land.

These increases in income, though shared by all farm families, have been distributed quite unevenly. Poorer families have been able to make only quantitative improvements in their standard of living, because even with the increased income there is no real disposable income beyond that needed to meet the family's basic human needs. In the lowest economic stratum, improved income has permitted children to be better clothed, women to wear shoes, houses to be improved with occasional purchases of wood for walls or corrugated metal for the roof. Such homes still contain little or no furnishings; cooking and eating utensils are still confined to a few pieces of pottery or enamelware.

The upper stratum of farmers in the village has had sufficient disposable income as a result of ALCOSA to continue and expand their accumulation of family resources. The most frequent new major purchases among people in this group include concrete-block formal houses, and the purchase of additional land. In the category of small consumer purchases, plastic tableware, food preparation utensils, simple wooden furniture, bedding to replace straw mats, better clothing for children, a third or fourth set of traditional clothing (the traje) for women, an additional jacket and pants for men, and perhaps a second radio for women's use at home while the original family radio goes with the men to the fields.

Farmers in all economic levels made purchases of additional farm equipment. The largest such investments are pack horses; almost half the farm families in the village now own one of these. Chemical sprayers are almost as costly, and these have become part of the standard farm equipment of almost everyone. One larger farmer owned four of these sprayers, or at least he did until one of them was repossessed during ALCOSA's purchasing moratorium this summer. In Chimachoy, the containers used for local transportation of crops are round nets. Each of these now costs \$3. Farmers who once got by with only five or six of these now own fifteen or

twenty or more.

The value of a traditional complement of farm equipment (hoe, machete, hatchet, sharpening stone, a few nets, ropes and harnesses) is less than \$50, even at today's rapidly rising prices. This is less than the cost of one common type of sprayer. New investments in farm equipment, therefore, although they average slightly less than \$100 per family and seldom exceed \$200 even among the largest farmers, represent 100 to 300 percent increases in the original level of investment.

Farmers deny that their income is now much greater than before. Indeed, when we calculate average farm income as in Table 4-3 we find net losses rather than net profits, at least if the farmers are to pay themselves the going rate for their own labor. Of course, the reported figures are based on typical yields; farmers with better skills, land, or luck have been able to harvest up to double these yields, resulting in very much larger net incomes. But only a few farmers can so outperform the local average, so there must be a better explanation for the apparent gap between smaller increases in income and obviously larger increases in expenditures.

There is such an explanation: debt. Local indebtedness has expanded tremendously, with most families now carrying three types of loans concurrently: long-term loans for land purchases (and in the cases of the few wealthier families, for construction of stores and residences as well), agricultural production credits for cultivation of ALCOSA crops, very small loans from itinerant merchants for the purchase of consumer goods such as radios and tableware.

None of these types of credit were available to Chimachoy residents as recently as the early 1970's. The latter two types have come into existence as a result of ALCOSA's presence in the town. Most farmers get their farm credit from ALCOSA itself, but some of the larger farmers have successfully sought credit elsewhere, from a government agency (BANDESA) or from cooperatives. Thanks to ALCOSA, the introduction of farm credits has been both thorough and rapid. In 1977, no farmers used production credits to purchase their inputs; in 1980, all farmers did. See Chapter 5, under "Economic Impacts," for a further discussion of the credit issue.

The inclusion of Chimachoy on the routes of several traveling merchants is also a direct result of the ALCOSA-induced increased incomes of families there. Small peddlers on foot there have always been, and there are more now than ever, but these men pass through irregularly and do not offer credit sales. A larger class of itinerant merchants, operating out of a motor vehicle, now come to Chimachoy regularly, usually once a week, to sell household goods and to collect installments due on previous purchases. Most households have made at least occasional purchases from the merchants such as these, making tiny weekly payments over a period of

months to purchase a set of metal pots or plastic plates. The material progress described in the previous paragraphs is shared by all Chimachoy households, but families in the upper strata have been able to leverage much larger quantities of debt to finance much larger increases in investment. Those who have been able to purchase more land most easily are the farmers that already have some of their own. These are the same families who have been building the better houses and the new stores that have provided such visible evidence of the town's economic growth.

Thus, the impact predicted in the 1977 report, a growing gap between the richer local farmers and their poorer neighbors has in fact come to pass in Chimachoy, although not in Patzicía. This gap is readily discernible to the people of Chimachoy, who describe it as a source of division within the community. For some time, the local village leadership and the staff of the Uleu Foundation have been trying to organize groups of farming men and women for various self-help projects, and there have been even more widespread local attempts to organize a cooperative. A key factor that has prevented these efforts from so far coming to fruition, according to interviews with village leaders, is the passive lack of cooperation (but not active disagreement) on the part of influential older men who head some of these wealthier families. Satisfied with their own recent progress, so other villagers say, they have been uninterested in collective efforts to speed the progress of others. Our own interviews with the larger farmers also reveal their belief that collective efforts should be resorted to only when individual self-reliance is insufficient to produce economic advancement. The dynamics are subtler perhaps than this short discussion suggests. This is not a simple rich versus poor division. For one thing, if we exclude Don Mateo Quejay from the discussion, none of these "wealthier" families are anything but poor in terms of the larger Guatemalan economy. For another thing, the young men who make up the village leadership active in promoting these collective efforts are young men many of whose fathers would have to be included among the larger farmers that they are criticizing.

Perhaps it would be fair to describe the dynamics within the community this way: although the "wealth" of the larger farmers is only incipient at best, the split within the community is not. We observed several discussions of "what to do" about ALCOSA's slow payments and temporary suspensions of cauliflower purchases. Larger farmers invariably proposed conciliation and negotiation, taking the view that the village's long-term interest required ALCOSA's continued presence. Poorer farmers, on the other hand, urged tactics of confrontation, such as a collective refusal to pay debts. In these discussions, poorer farmers repeatedly made the point that the larger farmers could afford to be conciliatory, since they had only suffered a temporary loss of income while the situation in their own families was more desperate. ALCOSA had urged them to grow cauliflower instead of corn, they said, and now there was nothing to eat. Their children had been forced to quit school and leave home to seek work as farm labor or domestic servants in San Andrés Itzapa and Antigua. In the end, the farmers of Chimachoy never were able to decide on a collective course of action, although petitions were drawn up and a delegation sent to San José Pinula.

### Household Impacts

During the cauliflower season, most women in Chimachoy spend 2 or 3 days a week planting, picking, and peeling cauliflower. Prior to ALCOSA's arrival, the women of Chimachoy worked in the fields very seldom, normally only a few times a year when there were large areas to be planted. (Planting was the one agricultural task that has traditionally involved women.) This has been a significant transformation of the women's role within the community, because it has broken down the normally rigid segregation of men and women into separate spheres of activity.

Unlike in Santiago where the women often carry out this work independently, women in Chimachoy work in agriculture primarily as assistants to the men of the family. It is possible, then, that this change in the women's role has led to a lessening of women's independence and an increasing subordination to their fathers and husbands. To check out this possibility it is necessary to look at the activities that women once performed that are now forgone in order to work in the fields. The one major woman's task that has disappeared almost completely is the marketing trip to the terminal market in Guatemala City. In the past, though men often carried their product to the terminal market, especially when there were new contacts to be made or farm inputs to be purchased, routine sales trips were often made by women. Frequently, they were the ones who accompanied their produce on the buses into town and actually made the sales to the merchants in the market. Both men and women, in their interviews, stressed the unpleasantness of these trips to the big city market and their growing fear of crime, now that the Guatemala City market has become infested with a type of mugger that specializes in following rural farmers until they have sold their goods, then robbing their money.

The products that they sold in Guatemala were the family's main cash crops, the ones cultivated by the men and the principal source of family income. The women also carried out smaller subsidiary agricultural activities to raise smaller amounts of subsidiary income which they usually use for day-to-day food purchases. Only the men's cash crop farming and the women's transportation of these crops to Guatemala City has been supplanted by ALCOSA. Women's smaller-scale activities continue as before: raising chickens and collecting eggs, milking the cow, collecting herbs and leafy vegetables that grow wild in the area, cutting the family's perennial flowers, etc. The total product from these activities is usually a basket full of produce, small enough to be carried on the head, which women take to sell directly to consumers in the markets of Chimaltenango and Antigua. Trips to these markets to make these smaller and more traditional sales continue to take up to 1 or 2 days of a woman's week.

Thus, women continue to sell their products in the local markets, but they are no longer the marketers of the men's products. The exact

effect of ALCOSA on women's power and influence within the household and within the community is therefore difficult to determine. On the one hand, they are fully involved with ALCOSA production, spend their days with the men, and thus have earned a new place in the community as central actors in the main income-earning activity. Some participate in the village-level "public policy" discussions about ALCOSA, and this kind of participation in these important community affairs was not common in the past. On the other hand, they sometimes used to receive themselves the family's income for cash crop sales. Now it is the men whom ALCOSA pays. It is likely that this has diminished women's influence over economic decisions within the family, but it is hard to say by how much. Women are still the principal consumers for the family, the ones who go to town more often and buy most of what is needed.

The role of men and children in Chimachoy economic life has changed also. Both groups spend much less time working as farm employees for others than was previously the case. With sufficient income from independent farming, fewer men seek outside employment and those who do spend less days working. More dramatically, and probably more importantly in the long run, school-age children have been freed from paid farm employment as the family's need for this income is no longer so desperate. Almost all children therefore attend school, most up to the 4 years now offered by the primary school in the village. The school operates only in the morning, and afternoons are spent at work in the family fields, but almost all families in the village now find the time and income to free their children at least for those mornings of school attendance.

Summing up ALCOSA effects on the families of Chimachoy, it may be said that family farming has become a commercial enterprise, one that earns enough to support the family at higher standards of living than ever before, and one that is strong and large enough to now require more labor inputs from all members of the family. Though it requires all members of the family to spend more time working together in their own fields, it allows them to forgo cash-generating activities that were disliked but necessary in the past, outside farm employment for men and male children, sales trips to Guatemala for the women.

### Personal Effects

A great many personal effects have already been discussed in the previous sections on community and household impacts, but there is one change in attitude that needs more emphasis. Farmers of Chimachoy and their families have long since entered a culture of "rising expectations." The eternal old cycle of agricultural subsistence had long since been broken. But until the coming of ALCOSA, "rising expectations" meant mostly frustration. Without a larger market for their more profitable crops, farmers could better

themselves economically only by abandoning the land they owned or rented and their vegetable skills to seek some kind of work somewhere else. The market was a missing ingredient. The coming of ALCOSA has brought an optimism, a hope, an expectation that it was now possible to combine the always preferred lifestyle, independent farming, with the new life expectations, economic progress and a better life for their children.

Associated with these new life expectations are changed aspirations for family life. Schooling, once distrusted and passively resisted, has become a valued asset that parents hope and expect to provide for their children. Both men and women, in informal interviews, showed interest in family planning, expressing the view that too large a family prevented the parents from providing their children with enough of a base for continued economic advancement. Men, in particular, took the position that lack of information about birth control was helping to keep villagers trapped in poverty, and suggested that the absence of this information was an intentional effort on the behalf of some unspecified, powerful "them" to keep "us" in poverty and ignorance. Such attitudes express the extent to which these villagers have left behind world views that traditionally accepted a cyclical (rather than progressive) existence, based on subsistence living and eternally unchanging cycles of the agricultural seasons.



(ALCOSA contracted crops are underlined.)

Table 4-2. ALCOSA Cauliflower Contracts in  
Chimachoy, 1980.  
(Source: Company records)

1.	Total contracting farmers				107
	Ethnicity:				
	Cakchiquels		102		
	Ladinos		5		
	Place of residence				
	Chimachoy (including San Diego Chimachoy):		93		
	Other villages		14		
2.	Total contracted acreage. (In cuerdas, each = approximately 1/4 acre)				1056
	Cakchiquels		994		
	Ladinos		62		
3.	Average acreages per outgrower. (In cuerdas, each = approx- imately 1/4 acre)				
		<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
	Cakchiquels	2 - 34	9.7	9	6
	Ladinos	6 - 19	12.4	12	6, 19
	Overall	2 - 34	9.9	9	6

Table 4-3. 1980 Cauliflower Production: Costs and Incomes in Chimachoy (per cuerda, each = 1/4 acre).

1. Gross Income at typical 1980 yields:

800 lbs. first quality product (@12¢ per lb.)	\$96.00	
200 lbs. second quality product sold to ALCOSA (@5¢ per lb.)+	10.00	
Total Income		\$106.00

2. Costs

Inputs:		\$84.00
Native cauliflower seeds	\$ 3.00	
Fertilizer and urea	46.00	
Insecticides (ALCOSA's recommended brands and quantities)	30.00*	
Land rent (@\$10.00 per 2-crop year)	5.00	
Labor (@\$2.00 per day):		\$64.00 (economic) 16.00 (cash)
Prepare soil	\$16.00	
Seed bed (imputed cost; normally family labor)	8.00	
Transplant (imputed)	8.00	
Cultivate and fertilize (imputed)	8.00	
Fumigate (imputed)	8.00*	
Harvest and deliver to ALCOSA (imputed) (8 cuttings)	16.00	
Total Costs		
Economic (including imputed wages for family labor)		\$148.00
Cash (excluding imputed wages for family labor)		100.00

3. Net Income (Loss)

Economic (including imputed wages as costs)	(\$42.00)
Cash (excluding imputed wages as costs)	6.00

\* Actual average usage of insecticide is \$6.00 instead of \$30.00, applied twice instead of weekly (imputed labor cost of \$2.00 instead of \$8.00). Actual economic costs are therefore \$118.00 instead of \$148.00; net economic loss is \$12.00 instead of \$42.00. Actual cash costs are \$76.00 instead of \$100.00; net cash income is \$30.00 instead of \$6.00. Most land is either rented or still being purchased, with annual payments at least equivalent to prevailing rental prices.

+ An additional 200 - 300 lbs. of second quality product was not harvested or sold.

## Chapter 5

### PATZICÍA

Setting out from Guatemala City into the central highlands, following the usual route along the Pan American Highway toward Quetzaltenango and the Mexican border, after 50 miles of travel one passes through the municipality of Patzicía. This town of about 12,000 inhabitants lies near the northwestern corner of the valley of Chimaltenango, in the Department of Chimaltenango. The town's center, the pueblo, lies a half kilometer off of the main highway, alongside the old paved route to Lake Atitlan. A majority of the municipality's population, however, does not live in the pueblo itself but in the four villages and ten smaller settlements within the municipality's boundaries.

The town's economic base and primary occupation is agriculture, with wheat and vegetables being the primary cash crops in addition to the milpas. There is some broken terrain, and a sizable portion of flat plain land, but most of the area under cultivation consists of rolling hills with slopes less dramatically steep than those of Chimachoy and elsewhere. The soil has a higher proportion of red clay and less black volcanic sand than the area around Chimachoy. For this reason and because of frequent killing frosts that prohibit dry season cultivation, the traditional rhythms of seasonal agriculture are different here than in Chimachoy, although both have always grown the same vegetable crops, especially cauliflower.

Patzicía is well known throughout Guatemala as the site of the last major Indian revolt, in 1944. The Cakchiquel native population of the town rose up against the Ladino people who had been for some time migrating into the town from the neighboring Ladino municipality of Zaragoza. More than 1000 were killed on both sides, and the town's population remains to this day bitterly divided between Indians and Ladinos. Since that event, the people of Patzicía have had a tendency to stay within their family units and "mind their own business." Fearful or suspicious of collective organizations and political activism and distrustful of each other as well as outsiders, both Indian and Ladino residents of Patzicía have earned a reputation among others in the area as "hard" (duro) people. These attitudes have long caused difficulty for ALCOSA in the area, as they did for us in our investigation.

Despite the widespread hard attitudes, Patzicía is by no means a traditional "closed" community. Sitting astride what has always been the principal route for commerce between the highlands and the capital city, generations of Patzicía farmers have been accustomed to producing cash vegetable crops for sale in the national market at the capital. The Ladino portion of the population has also been long accustomed to seeking construction and service sector work in the capital city. All of the older Ladino farmers interviewed had held such jobs in their youth, and some continue to seek construction work during the dry season. Younger Ladino men seem to be more occupationally specialized. Although many

young Ladinos have left Patzicía to work in the cities, especially after the 1976 earthquake, the young Ladino farmers we talked to have never left agriculture; those who left apparently never came back.

The indigenous population of the town, in contrast, remains entirely concentrated in agriculture. Ladino men who live in the town center itself sometimes work outside of agriculture, as store owners, truck or bus drivers, or laborers. Cakchiquel men, even those who live in the town center, are farmers. All the Patzicía men engaged in agriculture, whether Ladino or Cakchiquels, residents in town or in outlying villages, have access to land and work primarily as independent farmers. That is, the town seems to have no significant population of "landless workers." A majority of the farmers surveyed (28 of 44) report that they always hire outside labor to help with their cultivations. But the people they hire to do this work are either youths or other smaller farmers. Twelve of the 44 farmers in this survey, including a few Ladinos, reported that they sometimes work for others as paid farm labor. The farmers in the town may therefore be classified in the same three economic strata as Chimachoy: the largest farmers who always work with paid labor and never themselves work as laborers for others (this group includes the large majority of Ladino farmers); the middle stratum of farmers who occasionally or frequently hire other laborers and who seldom or never work for others; the lower stratum of smallest farmers who seldom hire others in their own cultivations but occasionally work as farm laborers themselves. Three quarters of these farmers own at least some of the land that they work (36 of 44); half of the group (22 of 44) rent all or some of the land they farm. As in Chimachoy, this widespread land ownership is a fairly recent phenomenon -- 29 of the 38 landowners report that they have purchased rather than inherited all or most of the land they own.

Due to its location astride one of Guatemala's major highways, Patzicía farmers have relatively easy access to a wide variety of markets. Transporting one's goods to the terminal market in Guatemala City is a simple and convenient matter. Once the product has been transported the short distance to the roadside, it is easy to flag down one of the many passing buses or trucks who specialize in this sort of farm-to-market transport. The chain of vegetable producing villages that line the Pan American Highway between San Lucas and Tecpan in the Valley of Chimaltenango has become an important source of vegetables for the El Salvador market. Salvadorian truck drivers frequently seek out farmers in Patzicía in their search for vegetables, particularly cabbage. Especially for farmers large enough to fill a Salvadorian's truck in a single cutting of cabbage, this is the market believed by farmers in Patzicía to be the most lucrative.

Another market which promises to become a major factor in future Patzicía agriculture, but one which opened only in the last month of our investigation, is the large new warehouse and buying station recently opened in Patzicía by CECOMERCA, the marketing federation of Guatemalan cooperatives. This new marketing organization and its warehouse are

financed by an agricultural marketing project of USAID/Guatemala.

Because of all these other marketing opportunities available to Patzicía farmers, only a small minority of the vegetable growers in the area contract with ALCOSA. Even in the village of El Sitan, the area immediately surrounding ALCOSA's buying station, the percentage of farmers who sell to ALCOSA probably does not exceed 20 percent. Approximately 180 farmers signed broccoli and cauliflower contracts with ALCOSA for the 1980 growing season. This number, which would amount to less than 1/10th of Patzicía's farming families, is a thinly scattered group drawn from a wide radius around the buying station. About 10 percent of these outgrowers, in fact, do not live or farm in Patzicía but in the three surrounding towns of Tecpan, Zaragoza, and Santa Cruz Balanya.

#### How ALCOSA Operates in Patzicía

There are important differences between ALCOSA's operating procedures in this town and in the other two research sites. Most importantly, the classification procedure is different here. Whereas in Santiago and Chimachoy farmers are allowed to classify their own produce, here in Patzicía this task is carried out by a cadre of about 12 women specifically hired to peel and classify the farmers' deliveries. According to ALCOSA field employees, this arrangement is necessary in Patzicía (as well as in several other buying stations) because farmers here cannot be trusted to follow ALCOSA's quality norms and classification guidelines. These employees state that ALCOSA prefers the simpler system of farmer self-classification but past efforts to do this in Patzicía has so far been unsuccessful. In the farmer self-classification system, the ALCOSA field employee checks the quality of the produce as it is brought to the weighing scales. Whenever such a system has been attempted in Patzicía, the time necessary to reclassify large proportions of the produce from first to second or second to reject status has so delayed the weighing and purchasing that it has proved impractical.

In Patzicía, therefore, ALCOSA pays a subcontractor, a locally important Ladino farmer named Arturo Vallerias to do this work. (All names have been changed.) He is paid the same half cent per pound price for this classification that in other areas is paid directly to the farmers.

Mr. Vallerias was probably the first highland cauliflower grower in ALCOSA's early operations. He had the good fortune to meet the company's original field man one day when he was selling cauliflower in the Guatemala City market. Although he was not then a very wealthy man by local Ladino standards, he is now, thanks to his contract with ALCOSA. The Patzicía buying station is built on his land, for which the company pays an annual rent. In the beginning, the company lent him the downpayment on a truck and hired him to transport the product from Patzicía to the plant.

He has since purchased a second truck, and now successfully insists that only his trucks be used for this route. Besides the classification contract, he has another contract to clean out the buying station and haul away the tons of reject produce and discarded cauliflower leaves. He has built a store next to the buying station, operated by his sister-in-law, where the farmers buy sodas and cigarettes while they wait for his employees to classify their produce.

To return to the subject of the classification system, Mr. Valleras has hired his wife and sister to classify the produce and then other indigenous women (sometimes more, sometimes less depending on the flow of deliveries) to peel the leaves and prepare the head of cauliflower for classification. These women earn \$1.50 a day for this work, fair enough by local standards when the day is short but very low pay on those frequent days when the classification process continues into the night. In a normal year (when purchases are not suspended), this job provides 50 to 60 days of employment.

In past years, the way Mr. Valleras and his classification crew carried out this job was a major source of dissatisfaction in the community. Cakchiquel farmers complained that he made them wait all day while he classified the products of his Ladino relatives, and that he classified unjustly, also to favor relatives. (Close relatives of Mr. Valleras amount to almost half of the Ladino outgrowers in the area or about 10 percent of the Patzicía total.) Many farmers also complained that the inexperienced and unsupervised peelers damaged much of the product as they bounced it around on their work tables and then subsequently downgraded or rejected it because of this damage. This year Mr. Valleras has hired a local indigenous man with previous experience as a straw boss in construction to take charge of the operation. This man's wife was also hired as the first Cakchiquel classifier. The previous complaints are no longer voiced, either due to the success of this new arrangement or due to the appearance in 1980 of much more serious problems to complain about.

Two other aspects of ALCOSA's presence in Patzicía are unique, not only compared with the other two research sites, but compared with all of the other buying stations which the company operates. The buying station there began operation in 1976; it was the first. For one whole year it was the only company-owned buying station; in 1977 it was joined by Chimachoy, and in 1978 by Santiago Sacatopequez and several others. To an even greater extent than Chimachoy, therefore, farmers in Patzicía remember the "good old days" when outgrowers were few and each attended personally, when the field operations were conducted by the highly regarded para-agronomist Pablo ("Don Pablito") Duches,\* and when ALCOSA's eagerness

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\*The architect of the highlands purchasing program, Mr. Duches quit in a pay dispute shortly after the AID evaluation was completed in 1977.

to get the program started meant that the company never quibbled over quality, weighing the cauliflower leaves and all, and paying a single top price for every head. Only in Patzicía can the farmers view the company's present operations through the perspective of their experience of those first years when the company was friendly, easier, and better paying.

Finally, Patzicía is unique among ALCOSA's buying zones in the lack of collective identity among its farmers. Partly as a result of the hard individualism so characteristic of its local culture, and partly because of the high turnover rate among its farmers (due as much to the greater availability of alternative markets as to higher levels of dissatisfaction), most of the men who come to sell at the buying station do not know each other. Divided ethnically into two groups, and geographically into more than a dozen, most of the men spend their days at the buying station talking quietly with the few other farmers with whom they are acquainted, men from the same village or more often the same family. As managers on the ALCOSA field staff are aware, it is this lack of mutual acquaintance in Patzicía that causes the company many communicational and organizational problems. For instance, the agronomists believe that the reason farmers' self-classification does not work in Patzicía is because it has been impossible to establish any of the sense of collective identity and peer group pressure that makes that system workable in other sites.

#### Agricultural Impacts

Most obviously, there has been a huge increase in the amount of cauliflower under cultivation in Patzicía. Additionally, about 20 percent of the farmers contracted by ALCOSA began to plant broccoli in 1980. The principal crop displaced by these new plantings for ALCOSA has been corn, which now accounts for about one-third of plantings of these outgrowers, down about 10 percent since 1977. These outgrowers cultivate less cabbage, potatoes, and wheat than previously, although it is unlikely that total plantings of these crops in the town have decreased much. That is, the 80 percent of the farmers in the area who do not contract with ALCOSA have maintained or increased their acreage in these crops.

The price of cabbage has stabilized considerably in the last few harvest seasons, due to the ALCOSA-induced expansion of cauliflower production and increased sales to Salvadorian buyers, an increasingly important factor in the market. Potatoes remain a high-investment, high-risk (because of wide fluctuations in the market price), but potentially very profitable crop which remains attractive to those farmers with enough economic resources to sustain the high levels of investment and risk. Wheat, in the Patzicía area, is normally sown in the late rainy season after the initial vegetable plantings have been harvested. Most vegetable farmers continue to be wheat farmers. Therefore, any switch from corn (a year-long crop in this area) to vegetables leads to an associated increase in the plantings of wheat.



The other two principal crops in Patzicia, beans and squash, have enjoyed high demand and high prices in recent years. In this area, they are grown as separate commercial crops, rather than associated with corn in the traditional milpa pattern. Since they are normally planted in the dry season, they are not incompatible with cauliflower production. It is therefore unlikely that plantings of these crops have decreased, even among ALCOSA outgrowers.

In 1977 profit levels available to ALCOSA cauliflower growers were much higher than the profit potential of any other crop. In 1980 this is no longer the case. The prices for other crops have risen relatively faster than ALCOSA's price for cauliflower and rapidly rising quality standards have led to a decline in yields of first-quality product, at least for the majority of outgrowers who are still planting unimproved native cauliflower. At present, if a Patzicia farmer meets certain conditions, it is more profitable to grow other crops for other markets than it is to plant cauliflower for ALCOSA. The necessary conditions to participate in other more profitable markets are these: regular market contracts, either in Guatemala City market or among the Salvadorian buyers; sufficient size to produce a truckful of product in a single cutting (in potatoes, cabbage, squash, and to a lesser extent beans, this is still quite small, much less than an acre); sufficient economic resources to sustain self-financed investments and the inherently higher risks of open market prices. In other words, economic conditions and the economic context in 1980 is much different than it was in 1977 for Patzicia farmers. Where previously production for ALCOSA was the economically preferable option, by 1980 it was not.

As a result, proportionately fewer farmers participate. The economic and agricultural profile of those who participate is different than anticipated, and the impact on the town's total agriculture is also less than anticipated. Only about 20 percent of the farmers whose fields lie within walking distance of ALCOSA's buying station sign contracts with ALCOSA. Farther away, the proportion is much smaller, although a few outgrowers come from as far as 15 miles away. Three distinct types of farmers sign ALCOSA contracts. About 70 percent of the outgrowers, including most of the Cakchiquels and a few of the Ladinos, come from the smallest and poorest stratum of farmers in the area. Another 18 outgrowers, or approximately 10 percent of the total, are members of the Valleras family, the Ladino family whose lands immediately surround the buying station and who have put all their eggs in the ALCOSA basket. The remaining 20 percent come from a stratum of larger and more sophisticated vegetable farmers with diversified vegetable plantings that always include some production of cauliflower for ALCOSA in addition to other potentially more profitable but riskier crops. A slight majority of this last group are Ladinos, including a few who bring their cauliflower and broccoli in their own pickup trucks from quite far away, but this type of farmer also includes a large minority of Cakchiquels. ALCOSA therefore has contracts in Patzicia with many of the smallest and a few of the largest farmers but with hardly any of the "middle" of Patzicia farmers most typical of agriculture in the area (with the exception of a few members of the Valleras family).

This discussion of small, middle and large farmers, it should be recalled, is useful for local comparison and analysis only; by Guatemalan or international standards, none of these farmers are anything but "small," with the largest of them farming less than 10 acres and earning little more than urban minimum wages.

Because ALCOSA outgrowers are such a small minority among local farmers, the total agricultural impact of ALCOSA in Patzicía is less than in the other agricultural research sites. The company's impact on its own farmers, however, is just as large as in Chimachoy and Santiago. These impacts include more sophisticated use of a much larger variety of fertilizers and insecticides, dramatic increase in the level of farm investment, dependence on production credits from ALCOSA--the same agricultural impacts found in Chimachoy. Additional impacts, which will be discussed in more detail later but which might be considered as agricultural impacts, include dramatic increases in the use of paid labor and the incipient appearance of labor-saving forms of organization and technology.

### Economic Impacts

As Table 5-3 clearly demonstrates, ALCOSA's present prices and quality standards no longer allow farmers the kind of very large (almost "windfall" level) profits that were possible in 1977. Indeed, the profit margin is so slim that the approximately \$25 worth of excess costs due to recently-fired ALCOSA agronomist's fraud represents the difference between net profit and net loss. (Farmers who purchase their inputs on credit from ALCOSA paid about \$5 more for fertilizer and insecticide than prices for the same product elsewhere, and were forced to purchase about \$20 worth of excessive and unnecessary insecticide, almost certainly due to fraudulent kickback arrangements between the agronomist who dispersed the products and the input suppliers. ALCOSA itself seeks neither to make a profit on these sales nor to earn interest on these credits.)

The farmers' profits in 1980 were further diminished by losses caused by ALCOSA's plant capacity crunch. These losses were unevenly distributed among farmers, depending on whether they had cauliflower in production during the July moratorium on purchases or contracts for late July and early August transplantings. A slight majority of these outgrowers had no losses whatsoever in Patzicía, a few outgrowers had losses that were disastrously large. The average (mean) loss among the farmers surveyed was \$77. As in Chimachoy, the calculation of these losses was based on a valuation of unharvested product at ALCOSA prices and a valuation of abandoned seedbeds based on lost labor time and actual seed costs. Many of the farmers who did incur small losses will reach the break-even point by the end of the second harvest in December, but few (approximately 15 to 20 farmers) will wind up their 1980 dealings with ALCOSA still carrying substantial net losses.

Even without these extraordinary losses, the possible earnings for ALCOSA outgrowers are not high. As mentioned before, vegetable farmers in Patzicía can earn more growing other crops for other markets. If farmers were to devote their acreage to corn, a year-long crop in this area that requires much less labor, they could earn almost as much seeking paid farm employment, either locally (at \$2 per day) or migrating to the coffee harvest (at \$3.50 per day). In contrast to Chimachoy, then, the economic impact of ALCOSA on its outgrowers in Patzicía is not that it raises income but rather that it permits even the smallest farmers to pursue their preferred occupation, independent farming, without sacrificing income.

The transformation from self-financing to credit as the source of the ever-increasing amount of working capital required by the smallest farmers is another significant economic impact. Dependence of small farmers on production credits has often in the past led to disaster, as a year or two of bad crops has led to the transfer of small farmers' lands to their creditors. All of the production credit borrowings in Patzicía, however, come from ALCOSA itself. As a creditor, ALCOSA is in a very different position with respect to its debtors than the traditional moneylenders. First, since they are the source of farm income as well as credit, these debts are likely to be paid off if there is any production at all. This year, for instance, ALCOSA paid itself first, even if that meant (as it did for many farm families) 3 months of no-income farming for the debtor outgrower. This can cause severe hardships, as indeed it did this year, but cannot be compared to the permanent economic damage and dislocation suffered by debtor farmers in the past, who often lost their lands to their wealthier money-lending neighbors. Although farmers in both Patzicía and Chimachoy feared and discussed the possibility throughout this disrupted summer, it still remains inconceivable to us that ALCOSA would wish to seize the assets of small farmers to collect these debts, or that the company could successfully carry out such a politically dangerous move, even if it so wished. Nevertheless, the farmers' fears are not totally groundless; such displacements of poor farmers by wealthy interests have happened before in Guatemala. In any case, the farmers' preoccupation with the issue demonstrates the kind of collective explosion that could result if ALCOSA or any other foreign agribusiness company ever got itself into the position where it became necessary to collect the debts from large numbers of small farmers.

Another economic impact that must be mentioned is the economic result of ALCOSA's providing enough income to small holders so that they need not seek farm work elsewhere. This impact is discussed below in terms of its reinforcing traditional values, attitudes, and lifestyles; but there is a more technically economic aspect to this issue as well. Wage rates for day labor in the Patzicía area, as in Chimachoy, are now responsive to ALCOSA's rhythm of activity. Since there are no longer any significant numbers of farm laborers in Patzicía, all local farm labor is performed by small holders who have surplus labor time available in addition to the time spent tending their own fields. Since so many of the smallest farmers in Patzicía are ALCOSA outgrowers, their involvement

in these labor-intensive vegetable crops has sharply reduced the amount of wage labor available to larger farmers, most especially in those months when cauliflower is transplanted or harvested. In April and May of 1980, labor rates rose to \$2.50 per day, and some farmers reported wage rates up to \$3. The "normal" rate has risen from \$1.50 to \$2 per day since the 1977 research. On the other hand, when ALCOSA stopped purchasing products in July, the wage rate dropped to \$1.75.

The expansion of the largest cauliflower growers is therefore being held in check by this shortage of wage labor at the season when their labor requirements are highest. New arrangements, even more advantageous to the laborers than the higher daily wage, are becoming every year more prevalent. For instance, during the period before the rainy season, when all the land must be prepared for planting and most farmers seek outside help to do this, labor is no longer contracted by the day but by the job. In this system, a work crew--usually a family--agrees to prepare the plot of land for a fixed price. The system encourages most rapid and intensive labor as well as higher prices for that labor. In Patzicía, the current price to prepare a cuerda of land is \$18 to \$20, which translates into an equivalent daily wage rate of \$4 to \$5. The earnings available from these jobs, indeed, are so much higher than subsistence that some poorer families annually depend on these earning opportunities as their source of working capital for the coming year.

Unable to find the labor they need, some larger families have begun to adopt more expensive labor-saving farming methods, such as the purchase of seedling plants instead of seeds. This raises their costs even more than the higher wage rates. This phenomenon of higher labor costs, even higher costs for labor substitutes, and labor unavailability during peak cauliflower periods--these are all no doubt factors that contribute powerfully to the decision of most larger farmers in the Patzicía area to leave ALCOSA and grow other crops. An aspect of this phenomenon that will also be discussed in more detail later, but which must be mentioned here, is the fact that only Patzicía has such sharp problems of labor supply because only Patzicía overlooks what has emerged in the other two villages as the obvious solution: farm labor for women.

### Community Impacts

Neither of the community impacts anticipated in the 1977 social impact study has come to pass in Patzicía, largely because ALCOSA's mode of operation here has changed since that observed in 1977. In the earlier report, it was anticipated that the large rates of return then available to ALCOSA outgrowers would transform agriculture and land tenure practices in the area. It was predicted that the increased demand for land and labor would lead to higher rents and an eventual concentration of land tenure, with the probable result that the poorer strata of the population would be forced out of independent farming into positions as farm labor on the larger Ladino's expanded farm enterprises. Since 1977, the relative profitability

of ALCOSA farming has dropped down into the range of a variety of other vegetable farming operations, with the result that the largest and medium-sized farmers have tended to drop out from, or at least reduce their participation in, the ALCOSA program. In fact, because of the continued convenience offered small farmers by the buying station, the primary participants in Patzicía are not the largest but the smallest independent farmers. It is still true that no other markets so conveniently accommodate small deliveries, though other markets have become more profitable for larger producers.

Farming for ALCOSA, at least in years when the company did not suspend purchases, remains the most profitable market available to the smallest farmers, who otherwise would have to pay to transport small quantities to distant buyers. As the result of this changed relative position in the farm products purchasing market, ALCOSA serves not as an agent of agricultural concentration but quite the opposite, as the agent that permits the smallest farmers to participate in the new expanded commercial markets. Through sales to ALCOSA, the smallest farmers have been able to maintain their independence in the face of rising costs of agricultural inputs and land rents. In short, ALCOSA in Patzicía has prevented the agricultural concentration that might possibly have occurred otherwise with the growth of larger-scale commercial vegetable farming in the area for the national and Salvadorian market. The second community impact predicted was the development of a small commercial center in the village of El Sitán, at the site of the buying station. This has not occurred, first because the Valleras family, after building their own store, successfully defended their interests and ran off of their property the itinerant peddlers who occasionally attempted to establish a foothold in that incipient market. Then, by means of one simple administrative change in 1980, ALCOSA eliminated any possible expansion of commercial development of the site. They began paying their farmers with checks instead of cash, dramatically transforming the nature of pay day at the buying station. Last year, on the weekly pay day, every farmer at the buying station had pockets heavy with cash. This year, all farmers receive is a newfangled piece of paper. Turning that piece of paper into spendable cash now requires a trip into the Departmental capital of Chimaltenango, where presumably the merchants already established in that city now have the most advantageous position in the competition for the farmers' quetzales.

One unintended impact of ALCOSA's operation in Patzicía results from the special position of the Valleras family as a de facto intermediary between the company and its outgrowers who deliver there. The problems that have resulted from this arrangement have already been discussed, but it is important to point out also the effect of these problems on local Ladino-Cakchiquel relations. The behavior of the Valleras family has added daily fuel to the simmering resentment that Cakchiquels feel for Ladinos. From one point of view, perhaps it may be said that ALCOSA has had no impact, since inter-ethnic tensions are not some new creation of the company. Taking a less superficial view, it may be said that, given the already present ethnic divisions, ALCOSA had the choice of locating its operation in the

Ladino or the Indian half of the community. Located as it is, in the Ladino half, it has reinforced the position of Ladinos by giving them de facto control over access to another important community asset. If the company, on the other hand, had chosen to locate on Cakchiquel land and to set up Cakchiquels as its intermediaries, the impact would have been an erosion of local Ladino domination. It would have required no further affirmative action on the company's part to have such a strong democratizing impact in the community; the simple existence of an important facility not controlled by Ladinos would have been of itself sufficient. Since the community in Patzicía is still sufficiently polarized so that there was no "neutral" option available to the company, the missed opportunity for positive impact must be considered not as a mere absence of impact, but as a negative impact reinforcing the existing inequality.

### Household Impacts

ALCOSA's effect on female sex roles in Patzicía is the only area of household-level impact that is different in Patzicía from the other two agricultural sites. ALCOSA has had contact with two distinct populations of women: a larger group of women who are members of farm families and a smaller group who have found employment as cauliflower packers working for Mr. Vallerias in the buying station. The employment impact is the more easily understood and easily discussed of the two: in these dozen jobs are the first paid employment available to women in Patzicía, excepting traditional domestic service and the occasional government position open to a few women with unusually high levels of education. As such, this employment might perhaps have at least some of the effects on the women involved as those experienced by the plant workers in San José Pinula (See Chapter 7.), but since the employment involves a maximum of two days work a week during the peak harvest season, and since it pays only \$1.50 per day, it is presumed that none of these employees are experiencing the kind of life-transforming impact that has occurred to some women in San Jose.

For some reason, farm women in Patzicía do not work outside their house. Patzicía is the only one of these three sites where ALCOSA's introduction of large scale cauliflower farming has not led farm families to begin utilizing their women in agricultural work. The cause of this phenomenon was a principal focus of the latter part of our research efforts, and several hypothetical explanations have been comparatively tested and discarded. All of the plausible-sounding explanations were contradicted by one or another empirical comparison among the sites. In Santiago, informants suggested that Patzicía women do not work in the fields because they continue to weave a great deal, something that women in Santiago have given up. But Patzicía women weave very little also, purchasing their clothing from the women of nearby Patzún, while the women of Chimachoy who do work in the fields, all continue to weave. Cakchiquel informants in Patzicía suggested that their women stay out of the fields because they imitate the behaviors of higher-status Ladinas. But Ladina women are more,

rather than less, likely to work occasionally in agriculture. The women of the Valleras family, for instance, began picking cauliflower when ALCOSA first arrived, but have since stopped the practice, now that their families can better afford hired labor. Similarly, the greater urbanization of Patzicía relative to Chimachoy has been posed as an explanation, but Santiago is more urbanized than either of the others, and their women work the fields. Finally, agronomists suggested that Patzicía women are less experienced with the traditional concept of a women's herb and vegetable plot near the house. But, though the concept is culturally familiar in all three towns, none of the women practiced it, but relied instead on picking herbs and greens that grow naturally in their towns without any need of cultivation.

Remembering that in the Cakchiquel culture women traditionally only work in the fields to plant the crop, it is the women of Chimachoy and Santiago that have changed their traditional behavior, not those of Patzicía. We are left only with a vague hunch that this pattern of women's behavior in Patzicía is part of the town's general cultural conservatism, a long-continuing reaction to the local events of the 1944 revolt.

We are left with no empirically grounded explanation of the cause of this finding, but about the empirical grounding of the finding itself there can be no question: in Chimachoy and Santiago, ALCOSA production has brought women into previously male spheres of activity; in Patzicía it has not. At least partially for this reason, farm women in Patzicía remain much less accustomed to extra-familial social interactions, much less willing to engage in conversation or express opinions without the protective presence of their husbands or fathers. Even though one member of our research team, Josefina Xuyá, is herself a Cakchiquel woman from a neighboring town, so that she speaks the local dialect of Cakchiquel and wears a local traje, most local women found the idea of discussing local events with her too threatening. Many were willing to talk with her only on the condition that their husbands be present, in which case the husbands invariably dominated the interaction. Only women from the uppermost stratum of Ladino households, some of whom operated stores or market posts, were able to express themselves relatively freely, and this despite the fact that their interviewer was obviously not a Ladina herself. In the other two agricultural sites, we rarely came across a woman who stated that she felt incompetent to discuss farm or household affairs; in Patzicía, this was the most frequent response. This seclusion of Patzicía women within the confines of their family is perhaps another example of the community's traumatized response to the events of the revolutionary uprising and to the ethnic tensions that have simmered ever since. Whatever the cause, it made the study of household impacts in Patzicía more difficult. Nevertheless, we felt that we were in the end able to interview enough women, both informally and in the survey, to ascertain that the unique social role of farm women in Patzicía was the only case in which ALCOSA's household impacts were distinct from those already described as having taken place in Chimachoy.

Table 5-1. Patzicía Agriculture: Total Plantings by Month of 45 Farmers Surveyed, in cuerdas. (1 cuerda = approximately 1/4 acre.)

Crops	--rainy season--																	
	'80	J	F	M	A	M	J	J	A	S	O	N	D	'81	J	F	M	A
Basic Grains:																		
Corn (361 total)					32													X
					318													X
					11													X
Wheat (1464)					55													X
					5													X
									34									X
									46									X
									41									X
													2					X
Beans (68)		2				X				10								X
		31					X											
			13					X										
				12					X									
Vegetables:																		
<u>Cauliflower</u> (241)		1				X			115									X
		3					X		30									X
			12					X		8								X
				12					X		30							X
					29					X			1					X
Potatoes (50)		2						X			9							X
			12						X				3					X
				9						X								
					15						X							
Cabbage (41)		6						X		8								X
		3							X		4							X
			2							X		8						X
					3						X		7					X
Squash (41)		23								X								
			12								X							
				2								X						
					4								X					
Lima Beans (54)					4									X				
								5							X			
<u>Broccoli</u> (3)														1				X
															2			X

(Crops purchased by ALCOSA are underlined.)



Table 5-2. ALCOSA Contracts in Patzicía, 1980.  
(Source: Company records)

1.	Total contracting farmers				178
	Ethnicity:				
	Cakchiquels	127			
	Ladinos	51			
	Place of residence				
	Patzicía (town center)	90			
	El Sitán (village near buying station)	18			
	Other towns and villages	41			
	Not recorded	39			
2.	Total contracted acreage. (In cuerdas, each = approximately 1/4 acre)				681*
	Cauliflower (n = 158)		589		
	Cakchiquels (n = 111)	365			
	Ladinos (n = 47)	224			
	Broccoli (n = 37)		92		
	Cakchiquels (n = 27)	70			
	Ladinos (n = 10)	22			
		<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
3.	Average cuerdas per farmer	1 - 20	3.9	3	2
	Cauliflower	1 - 19	3.7	3	2
	Cakchiquels	1 - 11	3.3	3	2
	Ladinos	1 - 19	4.7	3	2
	Broccoli	1/2 - 10	2.7	2	2
	Cakchiquels	1 - 8	2.6	2	2
	Ladinos	1/2 - 10	2.2	2	1

\* Due to incomplete records for 20 farmers, this total represents 158 farmers.

Table 5-3. 1980 Cauliflower Production: Costs and Incomes in Patzicía (per cuerda, each = 1/4 acre).

1. Gross Income at typical 1980 yields:

900 lbs. first quality product (@12¢ per lb.)	\$108.00
400 lbs. second quality product, sold to ALCOSA (@5¢ per lb.) or elsewhere	20.00
Gross Income	\$128.00

2. Costs

Inputs:	\$ 85.05 (economic) 75.05 (cash)
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Native cauliflower seeds	\$ 4.00
Fertilizer and urea	32.30
Insecticides (ALCOSA's recommended brands and quantities)	30.00*
Land rent (@\$20.00 per 2-crop year; imputed cost; land normally owned)	10.00
Pack horse rent (transport to buying station)	8.75

Labor (@\$2.00 per day):	\$ 66.00 (economic) 20.00 (cash)
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Prepare soil	20.00
Seed bed (imputed cost; normally family labor)	10.00
Transplant (imputed)	8.00
Cultivate and fertilize (twice) (imputed)	8.00
Fumigate (8 times) (imputed)	8.00*
Harvest and transport to ALCOSA (6 cuttings) (imputed)	12.00

Total Costs

Economic (including imputed costs of land rent and family labor)	\$151.05
Cash (excluding imputed land and family labor costs)	95.05

3. Net Income (Loss)

Economic (including imputed rent and wages as costs)	(\$23.05) *
Cash (excluding imputed rent and wages as costs)	32.95

\* Actual average usage of insecticide is \$9.00 instead of \$30.00, applied twice instead of weekly (imputed labor cost of \$2.00 instead of \$8.00). Actual economic costs are therefore \$124.05 instead of \$151.05; net economic income is \$3.95 instead of a net loss of \$23.05. Actual cash costs are therefore \$74.05 instead of \$95.05; net cash income is \$53.95 instead of \$32.95.

## SANTIAGO SACATAPEQUEZ

Santiago Sacatapequez is a very different place than Chimachoy or Patzicía. Located only 20 kilometers west on Pan-American Highway from the capital, the town is on the edge of suburban development. Although the population of the town is made up almost entirely of indigenous farmers, the encroaching land developments and the relatively easy accessibility of urban employment have encouraged many people to commute to urban jobs outside the town.

Another factor that makes Santiago very different from the other two agricultural sites is the presence of a massive long-term project of earthquake reconstruction and rural development. This aid project of the Swiss government has rebuilt the entire town's housing stock to very high housing standards, higher by far than most of the homes destroyed in the earthquake and higher than any other reconstructed housing in the area. After the reconstruction phase was complete, the project left behind a team of advisors, called the Swiss Group, that has undertaken a series of agricultural and social development efforts. The village is thus the beneficiary of massive amounts of foreign aid, much more so than Chimachoy and Patzicía, although both these towns also received foreign-financed reconstruction assistance after the earthquake.

The third big difference between Santiago and the other sites is the intensity of its agriculture. In the other villages, the average small farmer has ten or more cuerdas available for cultivation; in Santiago the average is three. Santiago was the beneficiary of a land reform project during the 1944-54 revolution. Small plots were parceled out to everyone in the village at that time, and a generation later in 1980 each farmer's landholdings have become quite small indeed. To survive on these teeny plots, Santiago farmers long since have become specialists in producing vegetables for the nearby Guatemala City market. Both Chimachoy and Patzicía are also vegetable-growing villages, with vegetable-growing knowledge far beyond the highland norms, but Santiago farmers are in a whole higher vegetable league, knowing how to get much higher yields out of a much wider variety of vegetable crops.

Fortunately for the very small farmers of Santiago, much of their land is more fertile than that of Patzicía and much flatter than the fields in Chimachoy. Much, though not all, of the villagers' parcels are well suited to the kind of very intensive horticulture that they practice.

### Why Study Santiago?

If Santiago Sacatapequez is so atypical an agricultural town, why did we add it to the research? The decision to do so was made late in the

research project, and unlike the original two sites, no comparisons are possible with the 1977 study. Indeed, ALCOSA did not begin working there until 1978. We added Santiago to our study partly because it is so atypical, its work with ALCOSA such a startling success. Our research strategy, sometimes called "deviant case analysis," was to compare the differences between Santiago and the other two towns to try to isolate the factors that have made ALCOSA's program there such a success and its impact so highly positive.

Because Santiago was added as a research site late in the project, our field investigation there was necessarily quicker and less complete. Fortunately, the Swiss Group has already conducted a great deal of evaluation research in the town to monitor its own work there, and they generously gave us access to their information. In addition to this pre-existing information, we were able to complete our two surveys there of farm men and farm women, but we were unable to spend as many days in observations and informal interviews as in the original two sites.

Both because our data base is smaller and because our purpose for studying Santiago is different, the plan of this chapter will differ from that of the previous two sites. Rather than attempt another full description of the town and ALCOSA's efforts there, we will concentrate on a few areas where it seems that the differences between Santiago and the other sites are most significant. In looking at these differences, our research interest has shifted somewhat: we are interested in the factors that have made the program so successful for the company as well as those that have made the impact so positive for the community.

### ALCOSA and the Cooperative

The way ALCOSA operates in Santiago is fundamentally different than its mode of operation in Patzicia and Chimachoy. For one thing, the company has purposely and consciously chosen to work through intermediaries in Santiago, at first the Swiss Group and now the cooperative. This reduces the company's expense considerably. It uses the cooperative's warehouse for its buying station, the cooperative's truck for transport from the town to the plant, and the cooperative's personnel to coordinate the program. It is the cooperative that assigns and keeps track of the plantings, keeps the records of who has delivered how much, and disperses the cash payments to the farmers. ALCOSA also keeps its own individual records of farmer's deliveries, using the same record-keeping system as in other zones, but this is only a backup for the files. In practice, the company issues the cooperative a single check, and the cooperative uses its own records to disperse the payment among its members.

Most striking is the uninvolvedness in the operation of the ALCOSA field staff. The company's agronomists and their agricultural recommendations play no part in Santiago agriculture whatsoever. Local cultivation

practices are based on research and recommendations developed by the Swiss Group's agronomists working in cooperation with personnel from the government's agricultural research institute (ICTA). Likewise, the person who weighs the delivered product and checks its classification is the man elected treasurer of the co-op. His salary is paid partly by the company and partly by the cooperative.

Because of these arrangements, the relationship between the weigher/classifier and the farmers is impressively different, free of the mutual hostility and tensions that exist elsewhere. Yet company records show that the product is at least as well classified in Santiago as in the other sites: this absence of conflict has not disadvantaged the company by lowering the standards of classification.

#### Different Agricultural Practices: Cause or Effect?

The average farmer in Santiago has lower costs than his counterparts in the other two towns, yields that are more than twice as high, proportions of first-quality product that are 15 percent higher than Patzicia and 20 percent higher than Chimachoy, and net income per unit of land that are many times higher than elsewhere. These farmers have somewhat better land to work with, but the main cause of these better agricultural results is probably a difference of farming technique. The difference in agricultural technique, in turn, is probably the result of three factors: an original higher knowledge of vegetable production that carries over somewhat into ALCOSA crops; more labor-intensive care on the much smaller plantings of each family; and the very different agricultural recommendations received from the agronomists working in Santiago.

As a result of their research, these agronomists recommend less frequent applications of smaller quantities of cheaper insecticide than does ALCOSA. Agronomists at ICTA have also developed systems that, for instance, permit the interplanting of corn and cauliflower so that the same tiny piece of land can provide its usual quantity of corn while also delivering cauliflower yields higher than farmers in Patzicia are able to achieve with cauliflower alone. They are also able to give the farmer more individualized attention, since there are two and a half of them (one part-time) for 400 farmers, compared to ALCOSA's ratio of four to 1700.

One source of the greater success of ALCOSA's program in Santiago, then, is easy to pinpoint--higher yields and higher quality products, resulting in higher farm incomes. Whether higher yields are cause or result of the program's success in Santiago is hard to say. It would be better to conceptualize it as an example of a golden circle of success: higher yields lead to farmer satisfaction and cooperation which makes them

more willing to follow agronomists' improving recommendations, which leads to higher yields and incomes, etc.

#### ALCOSA and the Cooperative

The cooperative benefits the company by lowering company expenses, in ways listed above. But these are rather small savings compared with the advantages the company reaps from the improved organization, coordination, communication and cooperation of farmers that the cooperative makes possible. The cooperative provides the company with local leadership that is both formally defined and fully legitimate. When the company has a problem, the cooperative leaders and their Swiss advisors are available to work out some sort of a solution. Once the solution has been reached and new arrangements or conditions agreed upon, then the company plays no role in attempting to disseminate the new information or discipline farmers to the new procedures. Such tasks are delegated to local farm leaders who have the grapevine contacts to spread the word and the credibility to enforce it. So, for example, when ALCOSA decided this summer that it had to temporarily stop receiving second-quality cauliflower, it had only to convince the cooperative leadership of the necessity of this (which it did by pointing to other zones where they had stopped purchasing altogether) and within 24 hours no more second-quality cauliflower was being delivered to the buying station. To achieve the same result in Chimachoy or Patzicía would have been almost impossible, requiring the local field employee to convince each farmer of the necessity and legitimacy of the company's request.

If the benefits to the company are impressive, the benefits to the individual farmers are even more so. First and most important, there is the potential clout of collective bargaining. This presumably was the background to the company's decision to continue purchasing cauliflower in Santiago even if nowhere else. (Of course, even here, the company's knowledge that the cooperative could guarantee that only contracted cauliflower would be delivered was an additional factor in the cooperative's favor. In less organized and less disciplined buying zones the exclusion of uncontracted product was a practical impossibility.) The cooperative's clout is enhanced by the vegetable-growing skills of its members and by the considerable independent clout of its Swiss advisors, but these are supplementary to the more basic source of its influence, the size of its membership and the discipline of its organization.

The membership also benefits because their cooperative is smaller than ALCOSA and, at least at present, more efficient. The cooperative store from which they get their supplies on credit is conveniently and locally available, and when it comes time to repay, the local organization is more flexible and more reliable in the way it operates its check-off.

The primary advantage of the cooperative to its membership, of course, is its organizational purpose. The cooperative exists to serve the needs of its members, not the requirements of a Guatemalan corporation or its corporate owners in the United States. Concretely, this means that the cooperative attempts to maximize the sales of its members. Currently, that goal is best served through cooperation with ALCOSA, but the possibility always exists that other alternative markets in the future may prove more advantageous. The cooperative already deals with one other American company besides ALCOSA, an exporter of fresh snow peas, and is making plans to produce dehydrated spices and vegetables for sale to CINDAL, Nestle's Guatemalan subsidiary that packages dehydrated soup mixes.

Thus in practical terms, since the farmer delivers all these products to the cooperative's warehouse and receives his pay from the cooperative, he benefits from the cooperative's diversification of his market without having to involve himself in all the complexity of separate contracts, delivery arrangements, and payment provisions.

Likewise, the agronomists who advise the cooperative provide its membership with the single source of recommendations for planning, planting, and cultivating the various crops. In developing their recommendations, these agronomists have as their principal priority the maximization of the annual income of the farm members. Agronomists with this priority are more likely to maximize farmer benefits than the company's agronomists. This should be true whether the company agronomist is pursuing the legitimate priority of maximizing the quality of the company's product, or the illegitimate priority of maximizing his own income in kickbacks from suppliers.

So far we have examined the benefits that the cooperative brings to the company and to the farmers. What about the benefits that ALCOSA brings to the cooperative? ALCOSA's involvement in Santiago began a year before the formal organization of the cooperative's organizers, and present leaders go out of their way to credit ALCOSA with partial responsibility for the cooperative's growth and success. ALCOSA is the entire economic base upon which the cooperative has been built. The co-op finances its entire operation through a 3 percent commission, or check-off, of its members' deliveries. The existence of such a huge and steady market has given the co-op a relatively stable financial base, which in turn has permitted it to operate with paid staff employees since the very beginning. Although the income generated from this 3 percent commission was not the only source of funds in the beginning (the Swiss contributed start-up capital as well), it was a much larger source of income than small-town cooperatives are usually able to accumulate.

An even more important contribution of ALCOSA to the co-op's rapid growth results from the company's acceptance of an early decision by co-op

organizers to restrict local farmers' access to ALCOSA. To contract with ALCOSA for delivery at the co-op's warehouse, a farmer is required to become a member of the cooperative. According to co-op leaders, it was neither the cooperative ideal nor their own energetic efforts that fueled the explosive early growth of the cooperative; they give all the credit to this simple requirement. The cooperative has grown to over 400 members from all the towns and villages in the Santiago municipality because all those farmers want to sell to ALCOSA, not necessarily because they all were so enthused about cooperativism.

On the other hand, all those farmers are so eager to sell to ALCOSA because of what the cooperative and its advisors have already accomplished. Farmers' net income on cauliflower production in Santiago is so much higher than elsewhere at least partially because of the excellent work of the local agronomists. Similarly, the cooperative spares its members the unpleasantness experienced by small farmers in other zones who have no choice but to deal directly with the company's field employees.

#### Santiago Farm Women

As the chapters on Chimachoy and Patzicía have already pointed out, the role of women in Santiago cauliflower production is unique among these research sites, and apparently also unique among all the highland buying zones. Women in Santiago are almost equal partners with their husbands in this production. In Chimachoy, women work alongside their husbands and generally assist in the fields; in Santiago women work in agriculture more independently. On any given delivery day, almost half the farm families are represented at the buying station by their women, while their husbands are occupied in other farm tasks and other fields. Informants explained to us that vegetable production is viewed as an appropriate and somewhat traditional women's activity in Santiago, even though this was not the case in other Cakchiquel-speaking villages in the vicinity. There is perhaps a more intimate connection between the intensity and tiny scale of farm production in Santiago and women's traditional small plots for growing vegetables and herbs. This explanation, offered by several citizens of Santiago, is one of the many we heard that seems logical, but proved hard to verify, since few women actually have such household plots, given the densely packed residential siting in the town center. In any case, there are no longer any vegetable-producing tasks considered inappropriate for women. The only one of these that remains, the initial groundbreaking with the hoe, is becoming increasingly obsolete in the town as the custom of hiring a tractor to do this work has become more widespread. Even the last step in the new Santiago process of farm production, lining up at the cooperative to collect your cash, is frequently assigned to the women. In Chimachoy, in contrast, the checks are made out directly to the men and women play no part in the actual collection of the family's main income.



For whatever reason, whether their agricultural work is the cause or merely the consequence of some wider cultural change, women in Santiago are much fuller participants in the production side, as well as the consumption side, of their family's economy. The sexual segregation into separate spheres of economic activity has broken down even more than in Chimachoy. Unlike Chimachoy also, the women of Santiago seem to be much more unambiguous beneficiaries of this far-reaching cultural change.

As in the other social differences and social changes that make Santiago unique, it would be overstepping the evidence to call ALCOSA the cause of these new social realities. On the other hand, one has to agree with the community's leadership when they state that without ALCOSA, these changes probably would not have occurred.

Why, then, has the impact of ALCOSA been so much more positive in Santiago than in the other villages? Principally because the residents of Santiago have used ALCOSA as a resource for planned community development. The residents of Patzicía and Chimachoy have also tried as individuals to use ALCOSA as a resource; most have to some extent succeeded, but the impact of ALCOSA on their lives remains essentially accidental. Like a mild and rainy winter, the company has brought them benefits, but its effects in their communities remain essentially outside of their control.

Table 6-1. Santiago Sacatapequez Agriculture -  
Total Plantings by Month of 40 Farmers Surveyed,  
in cuerdas (1 cuerda = approximately 1/4 acre).\*

Crop	Month												Total
	J	F	M	A	M	J	J	A	S	O	N	D	
Basic Grains													
Corn			3	15	56	10							84
Beans	1	7	6	2	2						2		20
Vegetables													
<u>Cauliflower</u>			1	3	27	43	28	9	2	2			115
Cabbage					3	3	6	2	2				16
<u>Snow Peas</u>							1	2	2	12			17
Fruits													
(trees)													15
Beets	1				2	5	2	2	2				14
Ejote	1	2		1			4		5	1			14
Flowers						12							12
<u>Brussels</u>													
<u>Sprouts</u>						3	4	4					11
Peas				1	4		1		1				7
Potatoes	1			1	2		2		1				7
Spinach		1			3	1	1	3					9
Chile	1	2	2			5							10
Squash		3							2				5
Radish	½	½			½	½	1						3
Lettuce					1	1	1						3
Parsley												1	<u>1</u>
													347

(Crops purchased by ALCOSA are underlined.)

\* Information is insufficient to supply time-line data as in the other two agricultural research sites.

Table 6-2. ALCOSA Cauliflower Contracts in  
Santiago Sacatapequez, 1979.  
(Source: 1980 Swiss Group Development Project,  
Annual Report, supplemented by additional research)

1.	Total Contracting Farmers	351
	Ethnicity:	
	Cakchiquels	339
	Ladinos	12
	Place of residence	
	Santiago Sacatapequez	198
	Santa Maria Cauque	83
	Other villages	70
2.	Total contracted acreage. (In cuerdas, each = approximately 1/4 acre)	900
3.	Average acreages per outgrower. (In cuerdas, each = approx- imately 1/4 acre)	

<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
1 - 6	2.6	2	2

Table 6-3. 1979 Cauliflower Production: Costs and Incomes in Santiago Sacatapequez (per cuerda, each = 1/4 acre). Source: 1980 Annual Report, Swiss Group Development Project.\*

1. Gross Income at typical 1979 yields:

188 lbs. first quality product (@11¢ per lb.)	\$206.80	
200 lbs. second quality product (@5¢ per lb.)	10.00	
Total Income		\$216.80

2. Costs

Inputs:		\$ 43.00
Native cauliflower seeds	\$ 3.00	
Fertilizers	20.00	
Insecticides	12.00	
Land rent	0.00+	
Transport by pick-up truck to buying station	8.00	
Labor (@\$2.00 per day)		\$ 72.00 (economic) 12.00 (cash)
Prepare soil	\$12.00	
Seed bed (imputed cost; normally family labor)	2.00	
Transplant (imputed)	14.00	
Cultivate and fertilize (imputed)	16.00	
Fumigate (imputed)	4.00	
Harvest and transport to ALCOSA (8 cuttings) (imputed)	24.00	
Total Costs		
Economic (including imputed family labor costs)		\$115.00
Cash (excluding imputed family labor costs)		55.00

3. Net Income (Loss)

Economic (including imputed wages as costs)	\$101.80
Cash (excluding imputed wages as costs)	161.80

\* Costs described here are those reported as "normal" in Santiago Sacatapequez; they are influenced by Swiss Group and government (ICTA) agronomists, who provide technical assistance there instead of ALCOSA, but they are not "optimal" (that is, fully following all recommendations).

+ Land is rented so seldom in Santiago Sacatapequez that there is no readily identifiable local shadow price.

## SAN JOSÉ PINULA

The Pan-American Highway south from Guatemala City towards El Salvador climbs sharply out of the valley of the capital city. Trucks and buses grind slowly up the hills past the new residential developments that are fast becoming the preferred neighborhoods of the city's upper middle class. Ten miles out of the city the terrain levels out into a flat plateau and the suburban residential developments give way to projects that call themselves "country estates." Not far beyond, a paved road branches off from the main highway, passes through an area of new industrial development lined with factories like that of ALCOSA, and plunges steeply back downhill into a lush green valley where the paved road comes to an end at the town center of San José Pinula.

At the time of the last census in 1973, San Jose was primarily an agricultural town, specialized somewhat in nursery and dairy farming, both to serve the capital city market. The town had a population of 3,627 in its center and a total of 15,350 within the borders of the municipality. In the years since then, the parts of the municipality along the paved highways, if not the town center itself, have seen a phenomenal growth in population, and a transformation of economic base. In this period, the outer fringes of Guatemala City urban growth had reached the borders of San José. This process was greatly accelerated after the earthquake of 1976, when the spurt of construction and reconstruction activity in the capital attracted many of San José's men to commute to construction jobs in Guatemala City and its new nearby suburbs. At the same time, the earthquakes sent many residents of the capital to seek housing out towards San José, a zone where the earthquake had relatively little effect. Between the migration of white-collar workers from the capital out to San José Pinula and the attraction of San José's blue-collar workers to jobs in construction, in factories, and in stores in the capital, the economy of San José has become tightly linked to that of the capital area.

In the same period, several large factories were constructed along the highway, first in the town of Santa Catarina Pinula, the town which immediately borders the capital, then in San Jose. The area is an attractive one for industrial development because of its location on a major highway, the availability of the essential urban infrastructures of power and water, and the distance from the capital city, near enough to be readily accessible to Guatemala City's business services yet far enough away to take advantage of cheaper land, supplies of minimum-wage labor, and governmental concessions that favor industrial development outside of the capital city.

Among the largest of these new industrial facilities is the vegetable freezing plant owned and operated by Alimentos Congelados Monte Bello S.A., better known as ALCOSA. In the first years after the small original plant was purchased by the American corporation Hanover Brands in 1975, ALCOSA grew to be one of the largest employers in the area. The plant itself now

employs a workforce that fluctuates seasonally from 150 to almost 300. Because of explicit management policy, the vast majority of these employees are women. Between 1975 and April of 1980, the company also operated three nearby farms, primarily for the production of broccoli and brussels sprouts. At the peak of these farm operations in 1976, the company employed 400 workers in these fields, almost all of them men. In addition to its direct employment, the company has made arrangements with subcontractors to clean and classify cauliflower, brussels sprouts and okra. The largest of these subcontractors, the preprocessor of all the brussels sprouts and okra for ALCOSA, is located also in San José Pinula, in the town center a couple of miles from the plant. During the okra harvest season (April to June), the subcontractor hires up to eighty daily workers, all of them nearby housewives or school-age children (10 to 15 years old). Conditions of work here at this processing shed are very different from those in the ALCOSA plant, because of the temporary nature of the employment, the low wages, and the informality of the operation which permits whole families of women to come to work there, adults and older children earning wages at the same time as they care for the younger children who play at their feet. The processing shed is also in operation, although on a much smaller scale, during the brussels sprouts season from September through November.

At its peak, ALCOSA has directly and indirectly employed almost 800 people, making it at that time the largest employer in the area. Now that the farm operations have been phased out, however, ALCOSA provides reasonably steady employment for approximately 200 people in San José Pinula, and seasonal employment for an additional 150. Approximately 80 percent of the permanent employees and all of the seasonal employees are women. The permanent workforce is drawn from a wide radius around the plant, from the town center of San José Pinula, from nearby villages of that municipality and the municipality of Santa Catarina Pinula (Ocales, Santa Ines, El Pajon, Cienaga Grande, and others), from other more distant municipalities (principally Fraijanes, ten miles distant; Puerta Parada, five miles distant; and Piedra Parada, eight miles distant); and from distant working class zones of the capital city. Most of these employees make at least part of their journey to work by inter-urban bus, using buses that run from their municipalities to or from Guatemala City and getting off the bus at the intersection of the main highway and the branch road to San José to walk the remaining mile to the plant. People who live in villages some distance from the nearest bus route spend up to 3 hours on their journey to work. Such people leave their homes long before dawn and return long after dark, even when the plant is not running overtime, as it usually is during the peak harvest seasons.

### Community Impacts

Although many of the women from the outlying villages remain in their previous homes and continue their time-consuming commuting throughout

their period of employment at ALCOSA, others eventually move into town. Those who do make this move normally take up residence in rented rooms in the town center, a few miles down the road from the ALCOSA plant.

These boarders maintain a variety of household living arrangements, but all of them are characterized by relatively small size of the household and the absence of adult male household members. Some of these employees share their rooms with other women employed at ALCOSA or other nearby plants, some with their own children (the most frequent arrangement), some with children and another relative who helps with household tasks and child care. As discussed earlier, these are the poorest housed among the employees surveyed, people whose crowded conditions reflect a material standard of living visibly lower than other employees. The probable reason for this is the necessity shared by most of these tenants of supporting, or at least helping to support, two households, the original household in the village and the new living unit in the town.

The day-to-day living arrangements of these rent-paying families are in many ways untraditional. Most importantly, these households lack the resource of adult time available for unpaid family labor that is so characteristic of the traditional rural household, especially combined or extended family households. This lack of time for household tasks or child care is usually aggravated by the relative isolation of these households. The very reason for their existence is the impractical length of time necessary to get to San José Pinula from the residence of origin; relatives and family members left behind in the villages are therefore almost by definition too far away to help out in household tasks. The impact of this relative isolation and lack of adult household labor on the family itself and more especially on the children of the employees will be discussed later. The point to be pursued here is the impact of these first urban households, with their relatively high demand for extra-family resources of goods and services, on the small town.

Most obviously, the concept of residential rent has been introduced into a community where it never previously existed, at least as a free market exchange between strangers. (Occasionally in the past younger families had used residences belonging to older relatives and had paid rent for this service.) Because rental housing is such a new phenomenon, there are no norms describing the appropriate responsibilities of either landlord or tenant. This presumably could lead to problems in upkeep or maintenance, although the issue has not been raised by the few tenant respondents in our survey. The more urgent day-to-day problems sometimes arise regarding cooking and feeding of the tenants. Some single women are not so much renting space as living with their landlord families, and their rent payment includes the expectation of participation in at least the small evening meal. Larger rental households, however are normally not considered boarders but tenants responsible for their own food preparation. This expectation causes problems in some households because these rooms contain no cooking facilities and access to the landlord's kitchen can be problematic.

A woman living in a place with no facilities for cooking (who has, in any case, little time available for cooking anyway) needs a range of urban food services that are only beginning to become available in San José Pinula: comedores (inexpensive homestyle restaurants, often a house with an extra table or two set up in a front room), stores or market stands open daily and during non-working hours, vendors of tortillas and other already-prepared foods, etc.

Alternatively--or better said, additionally--they need residential space designed to function as an independent rental household, fully separable from other households on the property, with direct access to the outside, and with some practicable access to cooking facilities.

Most of these households include children. Most of the households that do include children need some kind of child care service, something which is almost unknown and unavailable to those who are not wealthy. Unless a family is of high enough economic status to hire domestic help, child care in San José Pinula is taken care of by women of the family. When the mother herself is missing or working during the day, a female relative, usually her own mother, takes care of her children. When there are no such relatives in town, as is the case with the ALCOSA employees who rent these rooms, adequate child care is almost impossible. The most common solution to this dilemma is to leave the children in the care of the oldest sibling. Aside from questions of the adequacy of this child care arrangement, this practice effectively prevents school-age children from school attendance, a circumstance that is regretted by the mothers and universally deplored by others in the town. Some sort of child care arrangements are needed in San José Pinula, whether they take the form of formal cooperative organization supported by working parents or the rudimentary beginnings of commercial child care services, where mothers unemployed outside the home earn a fee for taking in other people's children during the day.

During the field research in San José Pinula, we found it easier to demonstrate the new needs on the part of some ALCOSA employees for extra-familial child care and food preparation services than we did to discover the extent to which new informal arrangements have begun to emerge to meet these needs. Interviews with proprietors of some of the largest and best established stores, for example, reveal no perceived change or growth in their markets since ALCOSA and the other new factories opened up. They believe that factory employees are more likely than other residents to make their purchases in Guatemala City, where a wider range of more fashionable and up-to-date merchandise is available at lower prices. But these merchants are selling goods, not the more needed services. The traditional sellers of food-stuffs, prepared foods, and comedor meals (as well as the most likely potential providers of child care services) are not merchant men but family women. Either as a full-time occupation or a part-time source of extra money, many women of San José Pinula have bought and sold foods in



the market, prepared tortillas or more elaborate snack foods to sell in the streets, or sold meals in their home to the occasional traveler or stranger looking for sustenance. There are stores and restaurants in town that serve many of the same needs for those who can afford them, but we are discussing here a humbler, cheaper, and less formalized sector of the economy, the one patronized by the great majority of working and family people in the community. Because the sellers of goods and services in this informal economy are so many and so dispersed, it is hard to assess the economic impact of the new ALCOSA employee market, and we were unable to do so. It is probable that this impact has been only slight, however, because of the small proportion of ALCOSA employees who live as renters in the town center and because of two other factors that prevent any rapid development of this humble economy. One factor is the very small disposable income that these renters have available, as long as they are using a proportion of their wages to support their village households elsewhere. This factor thus affects the size of the market; the second factor affects the number of sellers available in this market. ALCOSA's employment of women not only expands the number of households who need to make these purchases, but it also contracts the number of women who depend on these sales for income. Aside from domestic employment, entrepreneurial activities in this market are the only traditional sources of women's cash income. With the opening up of factory work to women, much higher incomes are possible in the plants, and there has been an undoubted transfer of some women from these small enterprises to factory employment.

Taking all of these factors together, it is most likely that the transfer of traditional women's activities of food preparation and child care from the sphere of the household to the sphere of the cash economy is proceeding at a slow pace. It remains more of an incipient and potential impact of ALCOSA employment on the community of San José Pinula than a small impact already present. The renting of rooms, the new landlord-tenant relationships, and the increased population density of the consequently more urban town center--this is an impact, on the other hand, that is already quite strong.

#### Freedom: The Fundamental Impact

A central theme of all our interviews with ALCOSA employees, expressed in different ways according to different personal circumstances, was that factory work brings women freedom; freedom first of all from constant fear that accompanies grinding poverty and ever-increasing debt, freedom from oppressive family situations, freedom from the never-ending "slave-like" work conditions of the live-in domestic employee, or freedom from the oppressive supervision, low pay, and financial deceit of the small business employer. (See Table 7-1 for a breakdown of previous work experience.)

Asked why they came to work at ALCOSA, some of the women interviewed described a situation of desperate financial need, inadequate income to

meet basic family needs, and ever-increasing debt. Unable to buy enough food or to pay for medical care, their life before this job was one of constant fear and anxiety. Some women described themselves as unable to sleep at night for their worry about what would happen to them and their children. They contrast this precarious existence with their present life, now that their ALCOSA wages permit them to gradually pay off their debts while still maintaining a standard of living which they consider to be at least adequate.

For other women interviewed, their family's financial situation before they took this job was not so desperate. They were surviving, but they nevertheless felt financially trapped, with no possibility of ever achieving a more comfortable level of existence either for themselves or for their children. They wanted to improve their lives, not merely subsist, and the improvement they sought was primarily economic. These women say that their ALCOSA wages have permitted their families to "better themselves," improving their housing situations, clothing themselves more respectably, making time payments on major consumer goods, a set of plastic tableware or a transistor radio. These material improvements in their standard of living lead them to think that they are making progress in the world, no longer trapped in a life of poverty and basic subsistence.

For others, ALCOSA wages represented freedom not so much from poverty but from unhappy or intolerable domestic arrangements. Having their own independent source of income has permitted them to assume a level of control over family relationships that is not possible for young women with no income of their own. This group includes some of the youngest women who have chosen to leave their parents and set up a household of their own, and older women with children who have been able to separate themselves from undependable, alcoholic, or abusive spouses. For other women, the ALCOSA income has permitted them to rid themselves of undesired dependence without necessarily taking the drastic step of establishing their own households. In a few cases, women's relationships with low-earning or chronically unemployed spouses have become more acceptable to the women, now that they no longer are financially dependent on these men. In a few other cases, the addition of ALCOSA income has permitted couples to leave behind intolerable extended family situations and establish a nuclear household of their own. In all these cases, women have been empowered in their domestic relationships by their ALCOSA wages, an independent source of income sufficient, if necessary, to support themselves and their children. Whether they live with spouses, parents, in-laws, or other relatives, their employment now gives them a choice that they never had before of deciding whether or not they want to continue these arrangements. It must be significant that more than one-quarter of the women we interviewed exercised this new freedom and chose not to live in traditional households headed by men. (These include the last four categories under "Household Structures" in Table 7-2.) Even for the majority of women who choose to continue to live with their parents and

spouses, their new economic independence is likely to transform family relationships, at least moderating the traditionally taken-for-granted family relationships of dominance and subordination, male over female, old over young. It is worth noting here that all the women interviewed did in fact exercise their power of the pocketbook. Most of these women hand over a fair portion of their paycheck to their mother or to some other female relative who runs their household or cares for their children, but none of these wives and daughters handed over all of their paycheck to anyone, and none of the married women reported handing over any of it to their spouses.

One additional area of freedom that ALCOSA employment has brought to some of these women is freedom on the job, at least relative to former employments. In small towns like San José Pinula, the only alternative to factory employment widely available for young women is domestic work. Women who had previously worked as live-in domestic help contrasted the work conditions of their ALCOSA job with the "slave-like" conditions of their former employment. In the bureaucratized atmosphere of ALCOSA, as in any other large plant, work tasks and responsibilities are relatively fixed and defined. Women who used to work as maids appreciate the apparently more limited work conditions of factories like ALCOSA. They like the idea of the time clock, the clear separation between working time owed to your employer and personal time of your own. From the time they arise in the morning to the time they retire at night, domestic help have no legitimate personal time when their employer does not expect them to be working. Likewise, some women even appreciated the division of labor, the apparent source of monotony and tedium of assembly line work. Such a clearly defined job description was preferred to the infinitely expandable work tasks of the domestic employee whose "women's work is never done." A smaller number of women had previously worked in small business settings, stores and restaurants. They preferred ALCOSA's relatively large size and bureaucratic impersonality to the constant close supervision of the small business owner who also had a tendency to try to "take advantage" of his young women employees. These women also contrasted ALCOSA's "fair" handling of wages and fringe benefits with small employers who often did not pay the legal minimum wage and sometimes sought to reduce these low wages even further through "financial trickery." To sum up what these women told us, the very conditions of large corporate employment which critics have so often indicted--the time clock punctuality, the unvaried routine, the impersonality, the narrow division of labor--all of these were perceived by some women as conditions of freedom on the job, at least compared to the conditions of employment in private homes or in small marginal enterprises.

As purchasers of their basic needs in a market economy, as wives and daughters in patriarchal family structures, all roles in which Guatemalan women confront the forces of large organizational and institutional systems, ALCOSA employment provides more leverage, more personal autonomy, more options in a widened arena of choice--in short, more individual freedom--than

they had previously experienced. No wonder they are so nearly unanimous in expressing their high satisfaction with the work and their desire never to give it up.

It would be unwise to leave the discussion of this topic without noting that what the women perceive, and we have described, as an increase in individual freedom, has been otherwise described by other social scientists observing similar phenomena. The classical French sociologist, Emile Durkheim, writing on very similar social changes in Europe at the turn of the century, saw that such increases in personal autonomy were accompanied by a breakdown of the traditional institutions of family and community that had once held the society together, a point much noted by conservative political commentators since the birth of factories in the Industrial Revolution. Most of the women we interviewed no longer live in their community of origin, a mobility that cannot help but weaken the social solidarity of such communities. Likewise, two-thirds of the mothers in the survey live in households that do not include the fathers of their children, a statistic that hardly supports traditional Guatemalan norms of family life. Indeed, a quarter of the whole sample (eleven of forty-two) and a quarter of the mothers (seven of twenty-six) live outside of the traditional family context altogether in households that include only themselves, possibly with a roommate, and their children, if they have any. Durkheim warned that people such as these women, no longer bound to their traditional places within family and community structures, would be likely to experience "anomie" as their now-unlimited material and social aspirations grow much faster than their means to achieve them. This would result, he said, in more rather than less dissatisfaction and unhappiness in the society, reflected in higher rates of crime and suicide. Perhaps the long-term results of ALCOSA's opening up of employment opportunities for women in San José Pinula will be as Durkheim suggests, but at present the only empirical evidence we have is that ALCOSA employees are nearly unanimous in describing themselves as more pleased and satisfied with their lives now than before they took these jobs.

#### Impacts on Attitudes: Lifestyles and Life Expectations

The most obvious attitude change that results from ALCOSA employment, visibly symbolized in the very clothes that employees wear, is the adoption of a more cosmopolitan consumerism. Most of the people we interviewed, plant managers, community leaders, and the workers themselves, commented that the factory workers dressed better and more stylishly than other local women of equivalent social status but lesser income. According to supervisors and other long-tenured workers, new employees invariably spend their first paycheck on a shopping trip to the capital, returning to work the next Monday with a whole new image, new shoes, new clothing, new makeup. This predictable behavior is the subject of much joking and teasing among the employees. This joking presumably serves as peer pressure on new employees.



Each of these behavior patterns, though by no means common to all factory workers are undoubtedly more widespread among these working women than among the rural female population generally. Following the usual practice of stereotyping, however, the behavioral characteristics of some of the factory workers are spread by association to include the rest. These specific behaviors are then interpreted, and this should not be surprising to anyone familiar with the general Latin American popular culture or its local Ladino variant, to indicate sexual promiscuity. There is probably some underlying kernel of truth to this stereotype, if the very high proportion of separated or never married women among the mothers in our survey is any indication. It is a generalized cultural belief that the sexual double standard must be enforced with a tight reign over women on the part of male authority figures in the family. Once women have rid themselves of these male authority figures, as many in our survey had done, it would not be surprising if this belief became something of a self-fulfilling prophecy. If there is any truth to the stereotype, it is that perhaps a higher proportion of factory workers than other rural women would be willing to participate in sexual intercourse unsanctioned even by the normative semi-permanence of common-law union, not as the stereotype would have it that all factory workers are more sexually promiscuous than other women.

Like other stereotypes, this one is more accepted by people who have no personal contact with factory workers than it is among those whose daughters, wives, and sisters hold these jobs. Thus the stereotype is more accepted by local upper classes and by rural farmers than it is by the working people of the town centers. This issue of the image of women who work in the factories is clearly locally important, as the subject was brought up spontaneously by many of the people interviewed. Community leaders would mention the stereotype in expressing their moral concerns; some of the workers themselves and even more of their older relatives were spontaneously defensive, expressing their opinion that even though this job was high-paying and sometimes required the women to work long into the night or even work night shifts, it was still a good and respectable type of work for young women.

Even if working for ALCOSA does not turn young women into female Casanovas, it may make them unfit for the locally traditional notions of expected married behavior in another important way. These women do not intend ever to return to the full-time "duties" (oficios) of the traditional housewife. Ninety-five percent of them (forty of forty two) expressed the desire and expectation to continue working, preferably for ALCOSA if they don't get laid off, into the foreseeable future, regardless of any husband or additional children they may acquire along the way. Nothing indicates so well their very high levels of satisfaction with their work and with their lives as working women. At the same time, no other change in life expectation could be so radical in its implications for family life. If

their expectations of permanent working motherhood are to be fulfilled, and the fact that two-thirds of them are already mothers would seem to indicate that this is a clear possibility, then adaptations of traditional family structures that support working mothers must become more widespread. The combination of a preference for residence in smaller household units such as nuclear families (and the increased economic ability to fulfill that preference) and the dependence on female relatives for such duties as tortilla preparation and child care would seem to require an adaption of the extended family pattern, one in which branches of the extended family remain as interdependent as ever but become residentially separated into distinct household units. In such a pattern; some of the duties traditionally expected of every housewife become specialized activities, carried out by a woman in one household for several other households as well as her own. Because of "penny capitalist" aspects of rural Guatemalan culture, Ladino as well as indigenous, the provision of such service between households, even between closely related households, is almost invariably repaid with cash. Thus, women in our survey almost always paid their mothers or their sisters a specific weekly fee to prepare tortillas or care for children. Thus, the cash wages paid by ALCOSA are distributed among households, and in the process, household tasks that were previously considered the unpaid duties of all women become specialized occupations of some women within the informal local sector of the cash economy.

The data from the survey contain a possible indication, however, that these women's desire to continue in this kind of work will not endure as long as they now think that it will. The only two women in the survey who expressed a desire not to continue working happened to be the only two women who have worked at ALCOSA for more than three years without receiving a promotion. All of the other women interviewed with equivalent seniority now work in specialized jobs of increased responsibility except for these two. Presumably, rates of promotion will never again be so high as they were in the initial start-up phase, given the necessary shape of ALCOSA's work force with its large proportions of basic assembly-line workers. Two people is hardly a large enough number from which to draw a serious conclusion, but if other workers become as disenchanted as these two after a few years on the job, many may decide once again to readjust their life expectations in unforeseeable ways.

Fulfillment of the desire expressed by the vast majority of our respondents to continue working outside the home would of course be made easier if they were to limit the number of their children. There is some evidence from the survey, impressionistic at best but still somewhat impressive since it is mostly behavioral rather than attitudinal, to indicate that this in fact will be the case. Most of the unmarried in this survey, that is those who are not already mothers, are older than the national Guatemalan average for age of female marriage. Likewise, at least the younger mothers in the survey generally have fewer children than the national averages for other married women of their own age. This does not hold true

for older women in the survey, but most of them presumably were not working mothers during the time when most of their children were born. From the very few indications we have of ALCOSA employees' attitudes toward family planning and ideal family size (the topic was not part of our standard interview schedule), the preferred family size is relatively small. But this is also true for both men and women in the agricultural research sites, and there is also some evidence from other research that Latin American women, at least, would prefer fewer children than they actually procreate but lack access to the information and resources necessary to carry out their expressed preferences. To sum up the rather scanty results of our research on this issue: it seems logical that factory employment of women would reduce their birth rates; there is some evidence that this is in fact occurring at least among women who begin work early in their child-bearing years; and finally, smaller families are preferred.

The last but far from least attitudinal area that has been rather dramatically affected by ALCOSA employment is that of self-esteem or self-respect. On the job at ALCOSA, as many of our respondents spontaneously stated, they perceive the treatment they receive as fair, equitable, and respectful. The company has given them a job to do, a responsibility to live up to, and management representatives seem to routinely trust them to fulfill that responsibility without fuss or unnecessarily close supervision. In its locker rooms, its cafeteria, and its grounds, as well as its food-processing work space, the company provides its employees with facilities that are unusually well-maintained and spotlessly clean. As might be expected of an American multi-national corporation, ALCOSA is much more bureaucratic than Guatemalan equivalents of similar size; the resulting impartiality and impersonality with which it treats its employees is interpreted by them as fairness and respect. The relative absence of personalism, paternalism, petty corruption and cynical mistrust is positively appreciated by the employees we interviewed. The company pays almost everyone, male or female, the same minimum wage, lays off and rehires strictly on the basis of seniority, distributes both early dismissals and overtime equitably, and generally makes no effort to extort extra effort out of individuals in return for special favors.

In the context of American labor relations practices, there is nothing unusually good or especially respectful about ALCOSA's treatment of its employees. In the Guatemalan context, however, or at least in the context of the previous work experience of those that we interviewed, illegally and exploitatively low pay, demeaningly close supervision and personalistic distributions of favoritism and abuse are work conditions that these women have unfortunately come to expect. Their absence is not something to be taken for granted.

The point is this. At ALCOSA, even new employees are treated by managerial personnel with a fairness and a respect that they may have never before experienced, at least from people of so much higher socio-economic



status than themselves. When asked what was the "best thing about the job," the companionship of fellow employees was the most frequent answer, but it was closely followed by references to the fair and respectful attitudes of supervisors and fellow employees.

At the same time as they begin spending their days in an atmosphere where they are accorded more respect, little enough as it is, than they may have previously experienced, their new status as wage earners around whose work requirements the rest of the family must now adjust improves their family position. Esteemed more by such other people who significantly shape the course of their daily lives, every social psychological theory suggests that they should come to more esteem themselves, and the behaviors and attitudes of increased independence described above would seem to suggest that so they do. This fundamental change in self-image, the "fuzziest" and the hardest to document of all the attitudinal impacts we have tried to describe, may be the most important and most positive impact of all.

#### How Generalizable Is This Case Study?

The social impacts we have described in this chapter depend as much on the context as they do on the nature of ALCOSA employment itself. Obviously, if the ALCOSA plant were to be set down in a community where equal opportunities for women were already the prevailing standard, and most women already worked outside the home for wages, then few if any of the positive social impacts we described above would have occurred. Specifically, the contextual conditions that have led ALCOSA to have such a dramatic and positive impact are these: 1) a general absence of full-time female employment; 2) a lack of other employment opportunities where rural women can earn as much as urban blue-collar men; 3) normal standards of living that did not require multiple incomes of working class or farm families; and 4) a cultural context that normatively subordinates women to men in all its institutional spheres. Thus, ALCOSA's wages would not provide these women the economic freedom that it does if they lived in one of the many urban zones of the Third World where multiple incomes are normally necessary for a poor family to meet its basic needs of minimal subsistence. Likewise, the relative lack of sex discrimination at ALCOSA is a positive factor in the lives of women who experience it only in comparison with the surrounding local norms of sex discrimination. In another context, a company like ALCOSA with its all-male and its predominance of males in skilled positions would hardly earn much praise for its affirmative actions to reduce sex discrimination. And yet, the four conditions that make ALCOSA such a positive force in San José Pinula are not that rare in the small towns and rural areas of less developed countries of the world. Unfortunately, for them, the living conditions of most women of the Third World are still such that the appearance of an ALCOSA in their town would be a positive rather than a retrogressive force in their lives.

Table 7-1. Workforce characteristics of female ALCOSA employees at San José Pinula, a summary of survey results.

	<u>No.</u>	<u>%</u>
<b>Age:</b>		
15 - 19	5	12
20 - 24	14	33
25 - 29	8	19
30 - 34	8	19
35 - 39	4	10
40 - 44	1	2
45+	2	5
<b>Education (numbers of years in school):</b>		
None	4	10
1 - 3	19	45
4 - 6	14	33
7 - 9	4	10
<b>Length of ALCOSA employment:</b>		
2 - 6 months	19	45
7 - 12 months	4	10
1 - 2 years	6	14
2 - 3 years	3	7
3 - 4 years	5	12
4 - 5 years	6	14
<b>Present job at ALCOSA:</b>		
Cut and trim (assembly line)	22	52
Wash (assembly line)	4	10
Inspection	3	7
Laboratory	3	7
Receiving	3	7
Packing	2	5
Warehouse	2	5
Operate scale	1	2
Painter, building maintenance	1	2
Supervisor	1	2
<b>Previous employment:</b>		
Other factories	15	36
Domestic service	9	21
Self-employed, market sales	5	12
Small enterprises, service sector	3	7
No previous work outside the home	10	24

Table 7-2. Households of ALCOSA Employees.

	<u>No.</u>	<u>%</u>
Marital status:		
Single, no children	16	38
Single, separated, or widowed, with children	17	40
Married or "united", with children	9	21
Household structures:		
Live with parents (never left)	11	24
Live with parents (returned, with children)	9	21
Live with nuclear family	7	17
Live in extended family	5	12
Live alone, but with young children	4	9
Live with girl friend and young children	3	7
Live alone	2	5
Live with girl friend	2	5
Household size:		
3 or less	8	19
4 - 6	14	33
7 - 9	9	21
10 or more	7	17
Total Respondents:	42	100%

Appendix A: Farm Women Questionnaire

Fecha \_\_\_\_\_  
Entrevista No. \_\_\_\_\_  
Sitio: \_\_\_\_\_  
Apellido \_\_\_\_\_  
ALCOSA: SI \_\_\_\_\_ NO \_\_\_\_\_

1.	N O M B R E	M o F	EDAD	AÑOS DE ESCUELA	RELACION CON LA CONTESTANTE	S o LI
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						

2. ¿Hay gente que se ha ido de la casa durante los últimos tres años? ¿Quiénes son?  
¿Por qué se han ido?

K'o jun vinec elenek'al, chupan re jay' re' che ri oxi' juna re', ¿Achique roma?  
y ¿Achique?.

3. ¿Hay gente que ha llegado a vivir a la casa durante los tres últimos años? ¿Quiénes? ¿Por qué llegaron?. No incluya recién nacidos.

K'o ta jun chic nínec' petenec ta iviq'uín no k'oje pa re jay' che ri oxi' juna' re' ¿Achique ca ri,? y ¿Achique roma?

4. Horario de algunas de las familias ayer (de lunes a sábado pasado):  
Hombres, mujeres, muchachos y ancianos

Achique ru samaj ruben ivir c'an ri ixo', ri achin, ri k'ual y vi k'o rij'  
finek' achique xuben.

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5. ¿Trabajan las mujeres de esta familia de vez en cuando en la agricultura? ¿Ha-  
ciendo qué?

K'o como exok'i ye samej pa toc juyu' vave y achique ni quiven.

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6. Fuentes familiares de ingresos en efectivo. ¿Quiénes lo reciben?. Ejemplo:  
Venta de leche, huevos.

Achique ru' vanic tok ri familia nok juba ru mero, a roma k'o juba ru cay'ij,  
achique ri' culun can ri mero, jari ixik' o ri ach'in, y achique roma.

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7. ¿Durante los tres años han comprado muebles, casas, terrenos, o han mejorado algo de su casa? ¿Cómo?

Chupan re oxí' juna'. re' achique k'o iviquín, vi ibanon jujun ilok'oj, achial jun chaq'uet, ulef o ibanon ru'tzil ivachoch.

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8. ¿Qué religión tiene la familia?

Achique ru religion re' c'alén ri familia.

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9. Descripción de la vivienda familiar

Ta bij' juba achique ru v'aníc' ri' jay'

- a) ¿Cuántos ranchitos hay? \_\_\_\_\_

Janipe c'a tok' jay' e k'o

- b) ¿De qué construcción es el rancho?

Achique k'a qui casan che ri' jay', vi lamina, bajareque, bloks, etc.

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Appendix B: Farmer Questionnaire

Nombre y Apellidos \_\_\_\_\_ Entrevista No. \_\_\_\_\_  
\_\_\_\_\_  
Fecha: \_\_\_\_\_  
Sitio \_\_\_\_\_  
ALCOSA: SI \_\_\_\_\_ (Años: \_\_\_\_\_) No. \_\_\_\_\_

ENTREVISTA CON AGRICULTORES

1. Qué opina usted ahora en cuanto a su negocio con ALCOSA?  
Achique nabij, rat vacamin, chirij ri a cay' rina j'ech che ri' ALCOSA.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. Qué opinaba usted sobre ALCOSA en los años anteriores?  
Achiche nabij' rat chij' ri ALCOSA ri juna' co vnec' can.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Si tiene la oportunidad, piensa usted hacer un nuevo contrato con ALCOSA?  
Si \_\_\_\_\_ No \_\_\_\_\_ Por qué?  
Ja' \_\_\_\_\_ Nak' \_\_\_\_\_ Achique roma.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Le gustaría hacer un contrato con otra compañía compradora de productos si hubiera la oportunidad en el futuro? Si \_\_\_\_\_ No \_\_\_\_\_ Por qué?  
Na vajo nab'en jun chic a contrato ri' q'uin jun chic compañía vi c'ota jun chi. Ja' \_\_\_\_\_ Nak' \_\_\_\_\_ Achique roma.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Si \_\_\_\_\_ No \_\_\_\_\_

Ja' \_\_\_\_\_ Nak' \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- ri juna' re'.

[illegible]



7. Por qué sembró usted?

Achique roma xaben a ticom vacamin.

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8. Trabaja usted o sus hijos como jornaleros de vez en cuando? Si \_\_\_\_\_

No \_\_\_\_\_ (detalles si contesta si):

Ya samej' ra't o abal' c'ual chi k'ij' samaj. Ja' \_\_\_\_\_ Nak' \_\_\_\_\_

Tabij' ju' ba' achique roma.

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9. Participa usted en algunos grupos aquí en la Aldea? Si \_\_\_\_\_ No \_\_\_\_\_

(Detalles si contesta si):

Ya ben ra't, pu tok' moloj'ri'l va ve pan aldea. Ja' \_\_\_\_\_ Nak' \_\_\_\_\_

Tabij' achique roma.

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10. Ha recibido usted la asistencia de algún agrónomo, sea, en sus cultivos?

Si \_\_\_\_\_ No \_\_\_\_\_ (Detalles si contesta si):

ac'ulun ra't, jun pira', a roma jun agronomo, pa ru bi' ri a ticom.

Ja' \_\_\_\_\_ Nak' \_\_\_\_\_ Ta' tzij' oj juba chique.

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11. Si tu tierra es propia, cómo la adquirió? (herencia, comprada, etc.)

vi ri' ulef abich'in, a roma k'o a viq'uin. Vi sumapie' ba' no chi  
avichin u a lok'on.

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12. De quién es la tierra que usted arrenda?  
A cho'k'o chin ri ulef k'o a viq'uín u ri' na k'ej'.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Cuántos años tiene usted de estar alquilando estas parcelas de tierra?  
Jan tape juna' a cha Join na k'ej re ulef re'.

13. Datos personales: Soltero o casado? \_\_\_\_\_  
A yonil ra't c'ule'l

No. de hijos? \_\_\_\_\_  
Janipe abal'c'ual

Otros en la casa? \_\_\_\_\_  
k'o jun chic pa jay'

Edad? \_\_\_\_\_  
Janipe a jun'a

Religión? \_\_\_\_\_  
Achique a religion

Ladino o cakchiquel? \_\_\_\_\_

# Appendix C: Plant Employees Questionnaire

No. de entrevista: \_\_\_\_\_

Lugar: \_\_\_\_\_

Fecha: \_\_\_\_\_

1- Dirección

2- Edad

3- Estado civil

4- ¿Sabe leer y escribir?

5- ¿Asistió a la escuela?, ( ) ( ) si asistió hasta que grado? 1 2 3 4 5 6  
7 8 9 10 11 12

6- Donde nació? \_\_\_\_\_ Si no es oriunda

6-1 Entonces cuando vino? \_\_\_\_\_

6-2 Por qué: \_\_\_\_\_

7- ¿Cuántos hijos tiene?

SEXO	EDAD
7-1	
7-2	
7-3	
7-4	
7-5	
7-6	

Van a la escuela? \_\_\_\_\_

8- ¿Quiénes viven en su casa? \_\_\_\_\_

9- ¿De quién es la casa? \_\_\_\_\_

10- ¿Desde cuándo trabaja en la fábrica ALCOSA? \_\_\_\_\_

11- ¿Desde cuando trabaja en la fábrica ALCOSA? \_\_\_\_\_

12- ¿Qué oficio desempeña en la fábrica? \_\_\_\_\_

13- ¿Dónde trabajaba antes de venir a ALCOSA? \_\_\_\_\_

- 14- Cómo era ese trabajo comprobado con ésta? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ ¿Cómo era trabajar allí? y ¿Cómo es el trabajo de  
ALCOSA?. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 15- En que trabaja su esposo, padre, u otro ( ), \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 16- ¿Quién sostiene su casa? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 17- ¿Quién opina; su esposo (padres) de que usted trabaje en ALCOSA? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 18- ¿Hay algo que a ellos no les parezca? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 19- Ha tenido problemas con su familia por trabajar en ALCOSA? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 20- ¿Cómo realiza las tareas que como ama de casa, esposa y madre tiene que hacer  
en su casa? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Oficios de limpieza: \_\_\_\_\_  
Hacer comida y tortear \_\_\_\_\_  
Lavar la ropa \_\_\_\_\_  
Cuidar a los niños \_\_\_\_\_  
Otros: \_\_\_\_\_
- 21- ¿Qué gastos tiene mensualmente?  
Comida \_\_\_\_\_  
Educación \_\_\_\_\_  
Vestido \_\_\_\_\_  
Otros, (animales). \_\_\_\_\_

22- ¿Qué hace con su salario? \_\_\_\_\_

\_\_\_\_\_

23- ¿Que cree usted que es lo mejor al trabaja en ALCOSA? \_\_\_\_\_

\_\_\_\_\_

24- ¿Qué es lo peor de trabajar en ALCOSA? \_\_\_\_\_

\_\_\_\_\_

25- En general que opina del trabajo de la fábrica? \_\_\_\_\_

\_\_\_\_\_

26- Cree, que a cambiado su vida desde que trabaja en la fábrica ALCOSA? \_\_\_\_\_

\_\_\_\_\_

27- Que piensa hacer en el futuro? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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